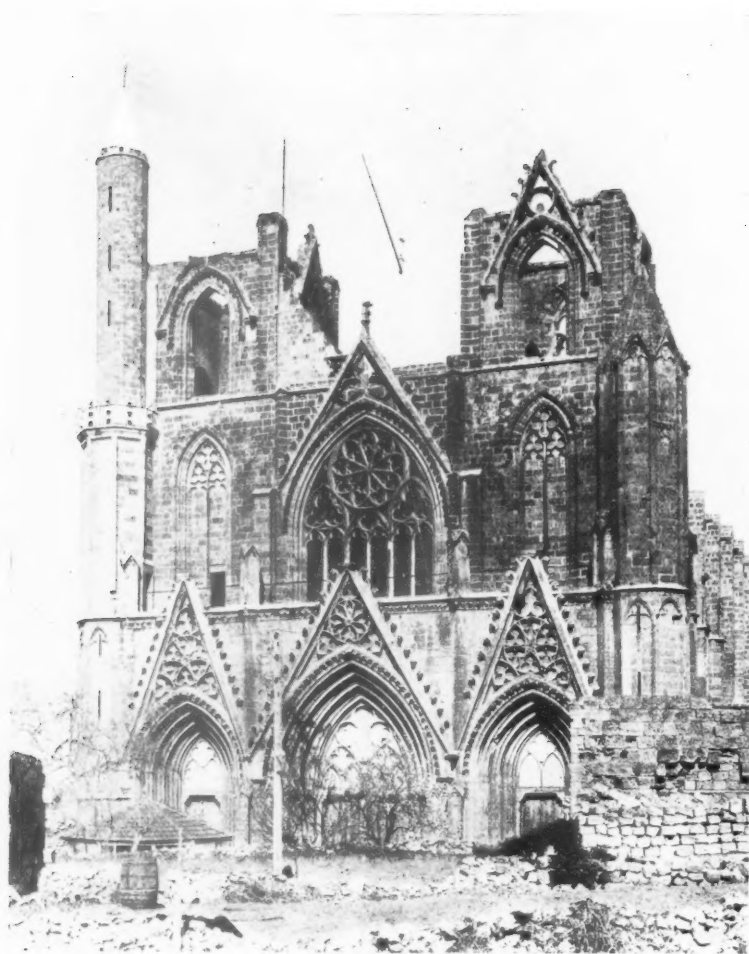


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FAMAGUSTA. ST. NICHOLAS

The West end of the Cathedral, with the Turkish minaret.

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JOURNAL OF THE ROYAL INSTITUTE *of* BRITISH ARCHITECTS

VOL. 40. 3RD SERIES

26 NOVEMBER 1932

No. 2

Journal

On the occasion of the opening of the new Parliament Building in Northern Ireland it was announced that His Majesty had been pleased to confer the honour of knighthood on Mr. Arnold Thornely, F.R.I.B.A., architect of the new building.

Many of us are apt to regard the scientist as an "odd fish." The waters in which he swims are very different from the common or tap variety and appear to us to be of very doubtful value for practical purposes such, shall we say, as driving a water wheel, or mixing with our whisky. We hesitate to take the plunge that will bring us nearer to him and his work, and even a slight obstruction will hold us back. It may well be, for example, that the mere title of *Building Science Abstracts* is one of the reasons why the true value of this publication is not, perhaps, sufficiently realised by the profession as a whole. Let us then disregard for the moment the somewhat forbidding title of the little journal in its rather sombre jacket and see what it is and what it can do for us. Its aims can be shortly defined. They are to provide those of us—which is tantamount to saying *almost all of us*—who have not sufficient leisure, opportunity or knowledge of tongues to read the world's literature of building, with a source of ready reference to all that is best in it. Although it does not claim to do all that many of us have come to expect of a "little grey book," it does set out to shift from the shoulders of the busy professional man the herculean task of sifting an immense mass of published material in the search for authoritative relevant information.

The specimen page which will be found in this issue of the JOURNAL will indicate quite clearly the methods by means of which *Building Science Abstracts* seek to serve us. Each month some 200 of such references are placed ready to our hands and every one contains the substance of an important contribution to the literature—be it a book, an article in a scientific, trade or technical journal, or a reference to a book review or to a patent specification. That is not all, for one of the most valuable features of the *Abstracts* is the publication in the December issue of each year of a copious subject index, which is compiled with the intention of providing a guide, not merely to the contents of the *Abstracts* themselves, but also to the whole of the information contained in the original sources. The four indexes already issued contain no less than

33,000 entries covering every aspect of the production and use of building materials and their behaviour in buildings; the December issue of the present year will bring this total up to well above the 40,000 mark.

These being the means by which the *Abstracts* seek to serve us, but little need be said of the uses to which both abstracts and indexes may be put. It is to be supposed that most of us are fairly busy men, and the value to us of such a ready source of information cannot be exaggerated. Reference to matter relevant to almost any problem which may confront us may assuredly be found within this ever-growing compendium. Month by month each issue of the *Abstracts* ensures that we shall be promptly informed of any advances made in the manufacture of building materials, in methods of construction, and in knowledge of the behaviour of materials in use. We may read of this new material, of that improvement in another, or of developments in structural design. Our view of the world's literature enables us to widen our conception of the general trend in building progress. On the other hand, the information which accumulates from month to month and year to year enlarges our knowledge of the nature of the materials with which we have to deal, their composition and properties and uses.

In the last issue of the JOURNAL it was announced that it has become necessary to increase the price of *Building Science Abstracts* to 1s. 6d. per copy, or 19s. per annum, post free. Although the standard price for individual orders will be 1s. 6d. per copy, arrangements will be made, provided sufficient support is given to the scheme, for blocks of 100 subscriptions or more to be supplied at the reduced rate of 10s. per annual subscription to British Institutions and Associations concerned with building, for distribution to their members. Members who wish to avail themselves of the specially reduced terms offered are asked to communicate with the Secretary at the Institute as soon as possible so that a block order may be made by the R.I.B.A.

Unemployment is a disease which admits of no specific remedy, but while the politicians debate the merits of numberless palliatives and so-called cures, one means by which immediate employment might be given to thousands in the Building and its associated industries is left

unused. We refer, of course, to the proposals, so consistently and strenuously advocated by Sir Raymond Unwin for the initiation of a great campaign of slum clearance. Sir Raymond dealt with this at length in his inaugural address which was printed in the last JOURNAL. We do not need to look far afield for endorsement of Sir Raymond's proposals by others distinguished in the political and economic world, and we like to think that there is growing a great body of opinion which will eventually find fruit in action. Some months ago we quoted the opinion of Sir Arthur Salter. The following quotation is from a commentary on the recent debate in Parliament on unemployment by Viscount Snowden which was published recently in a London evening paper:—

"From my experience I am convinced that little more can be done in road-making which will not be a burden on the taxpayer and ratepayer without giving any beneficial return. There is a little to be done in bridge reconstruction. Housing and slum clearance offer scope for employment. Our slums are a disgrace and a hotbed of immorality and disease. The local authorities cannot face the cost of clearance, and the State will have to shoulder the responsibility.

"Housing schemes for the lower-paid working classes could be wisely undertaken now while money is so cheap. Such schemes should be self-supporting, and the gain to public health would be enormous."

The first Annual Report of the Advisory Council to the Building Industry, which has just been issued, is the record of a very valuable and constructive year's work. It will be seen from the digest which appears on p. 61 of this JOURNAL, that the matters considered by the Council and its subsidiary panels cover very many aspects of architectural work, but though the subjects considered are diverse, the Council has adhered closely to the terms of reference which it laid down for itself when it was established a little over a year ago; these terms can best be expressed by a sentence from the Report which we can repeat here. "The main object of the Advisory Council is to secure the abolition of unnecessary restrictive regulations and bye-laws which hamper building and establish in their place reasonable conditions which are in consonance with building progress."

The work of the Council expressed by that sentence has had immediate effect, for it was largely as a result of its representations that the L.C.C. set up an advisory council on the London Building Act, and recommendations made by the Building Acts Panel that the code of steelwork regulations issued by the Department of Scientific and Industrial Research should be adopted for London were almost immediately carried into effect. The Report gives a good idea of the service that is being rendered to every section of the building industry by the Council's work. We sometimes, perhaps, go too far in pressing forward sectional claims at the expense of national, but the work of the Council and of the larger

body to which it is allied—the Building Industry National Council—is not sectional only. The building industry stands to gain by their work, it is true, but only because primarily national interests are being served. Co-operation, co-ordination, planning—these are all words of meaning to-day, and they represent the aspirations and methods of the leaders in economics, politics and industry. These efforts by leaders in the architectural and building world demand the support of every member of our profession.

It has been decided by the Council to modify the procedure for the introduction and reception of new Members and Students at General Meetings. In future new Members and Students will be asked to notify the Secretary beforehand of the date of the General Meeting at which they desire to be introduced and a printed postcard will be sent to each newly elected Member or Student for this purpose. They will be asked to take their seats on arrival on a special bench or benches reserved and marked for them. At the beginning of the meeting on the invitation being given to present themselves for formal admission, each new Member or Student will be led up to the Chairman by one supporter and the Chairman will formally admit them as Members or Students.

At the close of the meeting selected members of the Council will introduce themselves to the new members and will make it their duty to introduce them to other members. It is hoped that by the adoption of this method new members will be able to learn to know other members more quickly than is possible under the present system.

The Report of the British School at Athens for the year 1931-1932 has just been issued. It contains reports of the work being done by all the students in residence during the year, including that by Mr. E. R. F. Cole [F.R.S.], who, as holder of the R.I.B.A. Athens Bursary, spent part of April and May in Greece studying design and technique in the earlier periods of Greek architecture and Mr. H. Megaw, a student of the School of Architecture, Cambridge, who is holder of the Walston Studentship. Mr. Megaw has made drawings of the Churches of the Holy Apostles as a basis for the study of its position in the development of Christian buildings. He later made study of the ninth-century church at Skripou, and of that in the monastery of Sagmata. He also made a detailed study of the churches on Salamis, visited Salonica, and attended the trial excavations at Isthmia, making drawings and a survey of the site.

We regret to announce the death of Miss Bessie Charles [A.]. Miss Bessie Charles, who was elected an Associate in 1900, and her sister Miss E. M. Charles who was elected in 1898, were the two first women members of the R.I.B.A. They were the first to pass the examinations and had no successors for a great many years.



FIG. 14.—FAMAGUSTA CATHEDRAL FROM N.E. Note the Turkish flying buttresses and minaret.

CYPRUS ARCHITECTURE

THE FUSION OF BYZANTINE, WESTERN AND MAHOMMEDAN ARCHITECTURAL STYLES IN CYPRUS

A. D. R. CARÖE, A.R.I.B.A.

The original copy of this thesis, which was fully illustrated with plans, sketches and photographs, was burnt in Government House, Nicosia, during the riots of 21 October 1931.

THE importance of Cyprus through the ages has been largely due to its geographical position. Since the very earliest times when man first dared to venture forth from the Mediterranean shores this island has lain on or near the chief trade routes of the civilised world, and right down to our own times there has scarcely been one great nation whose interests have not been closely linked with Cyprus. Each culture has left behind its mark, and archaeologists revel in Babylonian, Egyptian, Phœnician, Minoan, Greek and Roman discoveries.

The Byzantine influence has been the most successful in establishing its claim over the island, largely aided by the fact that the Orthodox Church in Cyprus has been autocephalous ever since the fourth century. Its sway was, however, rudely shaken by the Crusades, when the Orient was flooded with vigorous impulses from the untamed West. The island became part of the Latin kingdom of Jerusalem, which after the fall of Acre was almost confined to Cyprus, though the old resounding title was maintained.

It was this Latin kingdom of the Lusignan dynasty which made possible the remarkable architectural developments which we are now to trace. All initiative passed into the hands of a small minority of feudal nobles, Western merchants and Latin priests. Yet the majority of the indigenous peoples, customs and beliefs remained unchanged, and as the great flood of Western energies ebbed slowly back, the newcomers came more and more to depend upon and to assimilate themselves to the peoples they had subjected. By the time that the last Lusignan ignominiously surrendered her crown to Venice in 1489 a hybrid civilisation had grown up which combined much from both West and East. This was well understood and respected by the Venetian Republic and proved strong enough even to influence the Turks when their conquest in 1571 began three centuries of blighting rule.

As each new cultural influence flowed over the island it left behind some permanent record of the architectural style then prevailing at its source. Some of these monuments of foreign styles are complete buildings, others are only fragmentary; some are magnificent, others of merely secondary importance. A few illustrations of some of the lesser known are given here as examples. But all these styles can be studied equally well, if not better, in the country from which they sprang. It is the fusion of these several styles which makes Cyprus unique and with which we are here concerned, and we shall not touch on the so-called "pure" examples except to illustrate the origins of the resultant Cypriot *mélange*.

At no period was there an adequate supply of Western craftsmen, except perhaps during the brief passage of a crusade such as that of St. Louis. Even during the thirteenth century, when the Latin energies were most vigorous, it must always have been a case of limited numbers of "Gothic" craftsmen working with the help of local labour. This can be seen to-day in the sparing use of carved ornament in Nicosia Cathedral and the extreme rarity of sculptured statuary. As the years passed by, the local masons became more skilled in Western technique; but on the other hand the supply of Western designers dwindled, and about 1370 seems almost to have ceased. This was the result of various influences in European history, amongst which the ravages of the Hundred Years' War in France are important. Up to 1350 Cyprus took a prominent position in the full flood of Gothic development; but thereafter she lost touch and was left to adapt and reiterate the *motifs* she had already received. The

150 years of Gothic predominance had, however, achieved magnificent results, of which the most prominent are the cathedrals of Nicosia and Famagusta and the royal Premonstratensian monastery of Lapaïs. The local prestige of such monuments was immense. It filled the minds of the Cypriot designers not only when they were working for their Latin masters, but even when a new orthodox Greek church had to be built. And thus was born the Cypriot fused and mingled style which is so interesting.

Architectural writers on Cyprus have hitherto either not recognised this development at all, or have labelled it as decadent. That it had its faults must be obvious to all who have examined its monuments. But we have outgrown the days when men condemned whole styles on a simple theory; when they dismissed English Perpendicular in a single sentence and wrote long books upon Italian Gothic. When we remember to look back at all, we learn both to appreciate and to criticise the output of all ages, provided that the interest and development are continuous as in this case. Even such a purist and convinced patriot as Monsieur C. Enlart has to admit of an example of Cypriot style "that such a *pot-pourri* produces an effect not only curious and picturesque, but really harmonious, is undeniable. It redounds to the honour of the styles of the Middle Ages and of the men of good taste who handled them."

This Cypriot style began, therefore, soon after 1350, was at its height in the fifteenth and sixteenth centuries and struggled on under the Turks right down to the nineteenth century. But the student is immediately faced by the extreme difficulty of establishing any definite chronology. The Orthodox communion is notorious for the small value which it attaches to records, and of the Greek churches in Cyprus it may be said that there are no inscriptions and very few documents. When we remember that the peculiarity of the local style is the intermingling and fusion of varied earlier *motifs*, regardless of date, the impossibility of exact chronology becomes apparent.

Apart from an interesting group of churches in the Karpas Peninsula which drew their inspiration from Syria opposite, but had little effect on the rest of the island, the main derivations of the Cypriot style were Byzantine, Gothic, Renaissance and Mahomedan. Of these the Gothic can be subdivided into a number of distinct schools. French influence is much the most prominent, and has been exhaustively analysed by M. Enlart. Though Nicosia

Cathedral was markedly inspired by the Ile de France; this influence was superseded after about 1250 by that of Champagne, to which Provençal characteristics were added in the fourteenth century. But the earlier Gothic architecture in Cyprus is not so exclusively French as M. Enlart in his proud patriotism would have us believe. In a number of cases it would be easy to supplement his parallels with others drawn from outside France; for the "Decorated" style spread to all the countries of Western Europe in the early fourteenth century, which is the period when it is perhaps hardest to identify general characteristics as being peculiar to one nation. But one would also expect to find specifically English influences in a kingdom founded by Richard Cœur de Lion and visited by the Crusade led by the future Edward I. And this is the case. Dogtooth is a typically English ornament of the thirteenth century. It rarely occurs in France, and only in those portions which had come under English influence. In Cyprus it is the most common of all carved ornaments. Dogtooth in England was used in a hollow, and was entirely superseded by about 1280. In Cyprus, however, it continued to be employed through the centuries *ad nauseam*, and can even be found on Turkish mosques. It is used in juxtaposition to various Southern ornaments unknown in England, and, leaving its true home in a hollow, creeps forward onto arrises. After the Venetian conquest of Cyprus, dogtooth, by a curious reflex influence, can be found in the cornices of contemporary palaces at Venice. It may be noted here that the zigzag ornament, which, though not peculiarly English, is hardly found in Western Europe after the twelfth century, also lasted on in Cyprus until comparatively modern times. Finally, a whole group of Southern European influences becomes apparent in the fourteenth century. In the architectural sphere these originated chiefly from Spain and Sicily, whose schools were very closely allied. They are most clearly recognisable in a pronounced flatness of treatment in windows and doors; traceries are predominantly quatrefoil, and are brought forward to the wall face, so that only one order separates the glass line from the bare ashlaring, and great use is made of plain voussoirs contained within a richly decorated frame. Architectural examples of the Italian mediæval manner are few in Cyprus, and chiefly confined to tombs and monuments. Italian paintings of "Giottesque" type, however, abound and spread even into Orthodox churches—witness St. George of the Greeks at Famagusta.

The most accurate impression of the remarkable

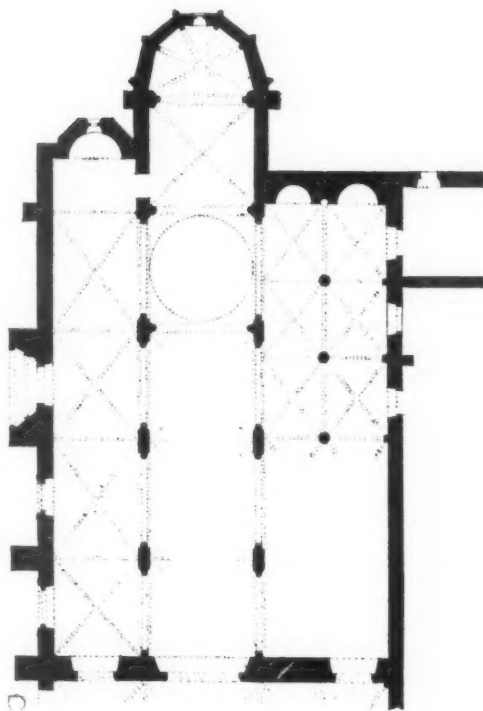


FIG. 1.—NICOSIA: ST. NICHOLAS

From Enlart

way in which all these diverse elements were fused into the conglomerate Cypriot style will be obtained by a study of some of its more important examples. Of these the most prominent is the Bedestan which faces the western porch of Nicosia Cathedral. Now a grain store, it used to be the Orthodox metropolis during the Venetian period, and has been wrongly identified with a Latin church known as St. Nicholas of the English. Its plan bears traces (Fig. 1) of the conjunction of two churches so usual in the Orthodox communion. Only the two apses and south wall of the original church remain, but the spacing of its arcade has been maintained and is different from that of the rest of the church. The main nave and north aisle had ribbed quadripartite vaults and apses of the Latin type, but one bay of the nave is covered by a circular domed lantern of Byzantine character which is hardly acknowledged on plan. At the west end there was a triple vaulted narthex of South European type, now destroyed. The north front, facing the cathedral, has solid

buttresses the full height of the building, around which the main cornice returns. This is of a type which frequently occurs in the earlier "pure" Gothic

The several orders of the archways, instead of being carried down the jambs on columns or mouldings so as to form a series of rectangular steps on plan, are



FIG. 2.—ST. CATHARINE, NICOSIA
XIVth Century West Doorway

buildings in Cyprus. Between these buttresses are placed three most interesting doorways. The western one has vigorous arch mouldings enriched with rather coarse foliage, and is evidently inspired by the west door of the fourteenth-century church of St. Catharine Nicosia (Figs. 2 and 3). The central doorway of the Bedestan appears to have been reused from a fourteenth-century church and to be intended in its present position to frame an external iconostasis. It contains an interesting example of late sculpture. The eastern doorway, which is much the most elaborate of the three, is a really remarkable attempt to rival the west doors of the cathedral opposite (Figs. 4 and 5). These last contain a feature of very unusual design.



FIG. 3.—BEDESTAN, NICOSIA
The North-West Doorway. Compare with the West Doorway of St. Catharine

stopped off at cap level by a series of corbels of delicate leafage, and the jambs below are splays ornamented with shallow panels or niches. The same disposition occurs in the Bedestan. The leaf corbels are identical in effect, though closer inspection reveals that grotesque masks with a distinctly Renaissance character have been introduced. The shallow niches on the jambs are based upon those in the nearest (S.W.) doorway of the cathedral, and even contain in their heads the same *motif* (peculiar to the neighbourhood) of a crown supported by two hands. The tympanum is enriched by a defaced figure of a saint flanked by six Venetian Renaissance shields, which are undoubtedly contemporary with

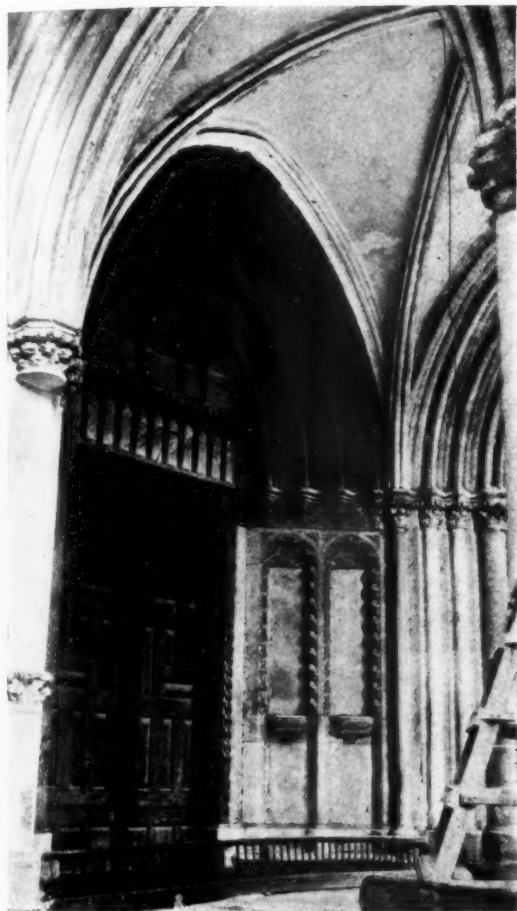


FIG. 4.—NICOSIA CATHEDRAL
The South Doorway in Western Narthex

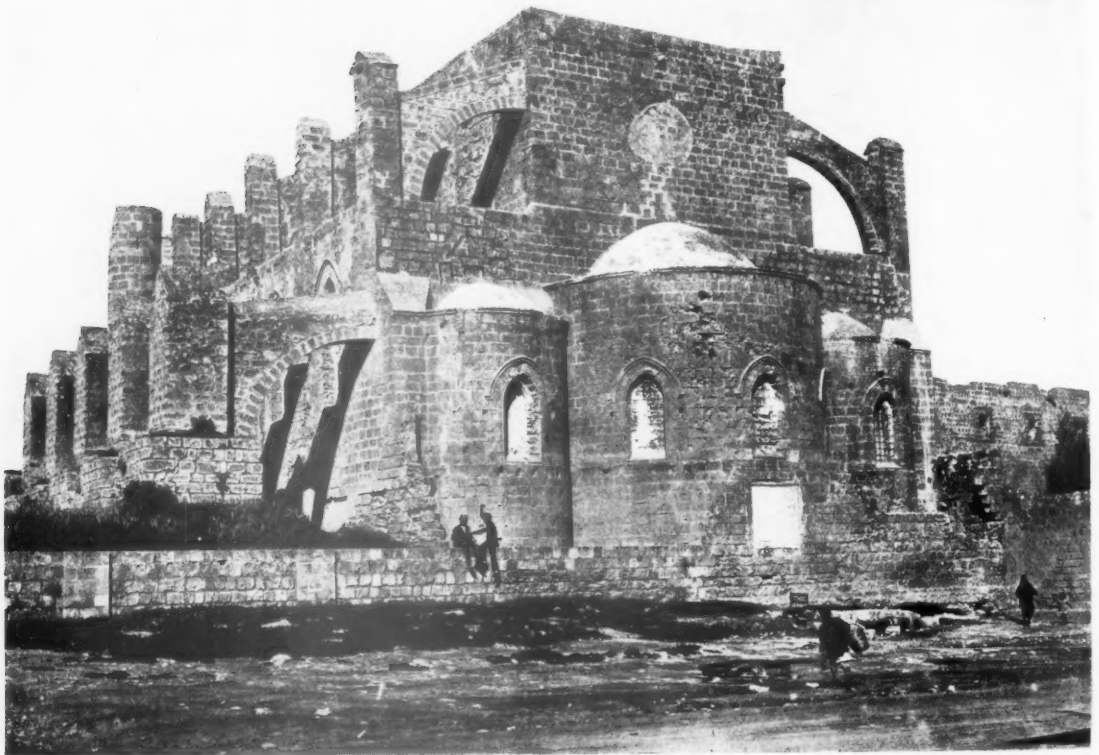


FIG. 5.—NICOSIA
Eastern Doorway of Bedestan, seen from within the Western
Narthex of the Cathedral

the rest of the work. Dogtooth occurs among the rich decorations of the arch moulds, and the gable over has clinging crockets which are exact replicas of those on the western gables of the cathedral.

Rather smaller than the Bedestan is the church in Famagusta known, on rather doubtful authority, by the title of St. Peter and St. Paul (Figs. 6 and 7). This was originally an Orthodox church; it was then turned into a mosque, and is now used as a petrol store. In internal arrangements and proportions it approaches very closely to the normal "pure" Gothic church of the Latin rite. A broad central nave is separated from two aisles by plain cylindrical columns carrying the main arcades and triple

shafts which support the main vault, lighted by a clerestory. There are three semicircular apses, the vaults are quadripartite, and the windows are mostly lancets. Even the Latin custom of having sacristies at the east end has been adopted, though there is little call for them in the Orthodox ritual. Some refinements of the earlier Gothic are, however, lacking. The vaulting shafts are inadequately grouped, and are so close to the wall face that no room is left for the normal wallribs. On the gaunt exterior, differences from the earlier work are more obvious. The aisle walls had no buttresses and were built abnormally thick in order to sustain the vault-



FIGS. 6 AND 7.—FAMAGUSTA. ST. PETER AND ST. PAUL



FIGS. 8 AND 9.—FAMAGUSTA. ST. GEORGE OF THE GREEKS

Above: From the North-West

Below: The East Triapsidal end



FIG. 10.—FAMAGUSTA. ST. GEORGE OF THE GREEKS

Showing the ancient Byzantine gable of the transept incorporated in the great 15th century church

[Note the horizontal *tas-de-charge* of the springers]

ing thrusts. The nave vault is supported by unmoulded flying buttresses of rather weak appearance. With the exception of the vaulting bosses there is no carving inside the church. Across the west end there is an unusual internal wooden gallery, which joined the flats over the aisle vaults and was possibly connected with the royal palace by a bridge over the street. The particularly fine doorway on the north front appears to have been reused from an early fourteenth-century church.

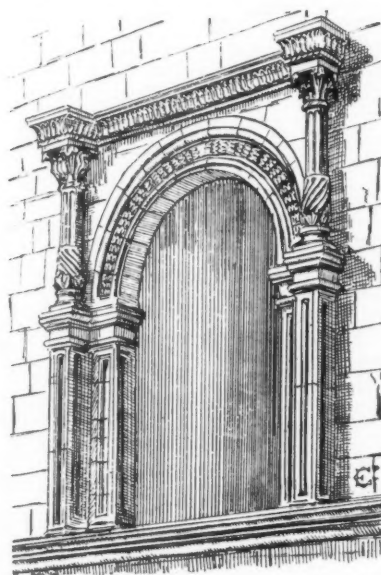
Many points of similarity can be traced between St. Peter and St. Paul and the Orthodox cathedral in Famagusta, known as St. George of the Greeks. This building (Figs. 8, 9 and 10) which measures 123 feet by 79 feet, is said to be the largest Orthodox church which was ever built during the later Middle Ages, and should be compared in size to the diminutive contemporary

churches which were being raised in the Morea. The dimensions and general disposition of St. George's were clearly prompted by a spirit of rivalry with the Latin cathedral, and form a striking example of the extent of the Latin influence on the hostile Orthodox communion. The small original cathedral, of typically Byzantine type, dating from about 1100, remains alongside its large successor, which appears to have been built during the fifteenth century. The masonry construction of the later building is of the very highest Gothic order, with careful ashlar, delicate mouldings and horizontal *tas-de-charges*. That it is now so largely ruined is chiefly due to the Turkish bombardment of 1571. Its plan is almost identical with that of St. Peter and St. Paul, but to a larger scale. One bay of the nave was surmounted by a domical lantern as in the Bedestan. Again there are no aisle wall buttresses. It is very remarkable to find in an Orthodox church the usual fifteenth-century Latin practice of recessing the church walls for "Founders' Tombs," the sale of which proved a lucrative source of wealth. The western doors are ornamented with flamboyant foliage placed beside English dogtooth, which is here properly confined to its traditional hollows. The apses are still decorated with frescoes which, though inferior, are markedly in the Italian rather than the Byzantine manner. On the other hand, there were two rows of steps round the central apse, which is an unusual return to primitive Byzantine tradition. The lancet windows have single cusps. Portions of the original glazing have been found, which consisted of glass roundels set in a plaster matrix after the old Byzantine methods now employed more roughly by the Turks. It seems probable that this type of glazing was also used in the early Gothic churches in Cyprus. Such glazing needs frequent attention and repair, and the care with which access was provided to all the windows in the Latin cathedrals of Nicosia and Famagusta is very noticeable.

Parallel with these Cypriot churches of predominantly Gothic type, many others were being erected in a manner approximating much more closely to the true Byzantine tradition. These were chiefly in the smaller towns and villages, where at no period was the Latin influence strong. Yet even here the conglomerate character of Cypriot architecture was maintained. Pointed hoods with mouldings and corbels were introduced over the doors, and the main interior arches and windows are often pointed and decorated with Gothic mouldings. Ayios Panteleimon near Morphou and Ayios Eulalios at Lambousa (Fig. 11) may be cited as examples. At Antiphonitis a loggia in true fifteenth-

century style has been added on the south side of the Byzantine church. Strong Venetian affinities are noticeable in the richly carved, gilded and painted iconostasis which occurs in all such churches. Here it is not easy to disentangle the effects of Byzantium on Venice from those of Venice on Byzantine art. Yet on occasion the introduction of classical pilasters and details leaves no doubt of the direct intervention of the Venetian Renaissance.

Examples of the pure Renaissance style in Cyprus are few, if the great fortifications of Famagusta, Nicosia and Kyrenia are excepted. It is interesting, however, to note how during the Venetian period small portions of Renaissance detail were absorbed into the Cypriot style without changing its general character. We have already noticed the shields and masks in the N.E. doorway of the Bedestan. One of the most curious examples occurs at the monastery of Ayia



From Enlari

FIG. 12.—WINDOW IN THE MONASTERY OF AYIA NAPA

Napa (Fig. 12) which appears to have been built about 1530. Here we find such normal Gothic features as a pointed moulded archway decorated with fifteenth-century shields, and the Southern French custom of decorating the external angles of a building with engaged shafts with caps and bases. And yet stringcourses are classical, and the semicircular windows with their panelled pilasters and fourteenth-century caps present a combination that it would be hard to parallel. An almost equally remarkable conjunction occurs in the building which abuts on the west front of Famagusta Cathedral (Fig. 13), and was built during the Venetian domination. A central doorway is flanked by two large circular windows, over each of which is a marble Venetian shield. The doorway is semicircular and is contained in a shallow projection, the lower angles of which are decorated by markedly Gothic angle shafts. The arch is in five orders richly decorated, the inner with zigzag of Romanesque memory, the others with dogtooth and flamboyant carving. Finally, the outer order is supported on Renaissance pilasters with sunk panels and central medallions. The guest-house of the Augustinians at Nicosia shows more pronounced Renaissance influence. Yet the Gothic angle shafts remain and the lintel of the doorway is supported on corbels that



FIG. 11.—AYIOS PANTELEIMON : MORPHOU



FIG. 13.—FAMAGUSTA. SCHOOL ADJOINING THE CATHEDRAL

might have been worked in Burgundy in the thirteenth century.

When the Turks conquered Cyprus in 1571, not only were large numbers of churches destroyed, but all the Latin priests and ritual were swept out of the island. The conquerors constructed most of their mosques in the chief cities out of these abandoned or ruined churches, and through the necessary works of repair were first brought into touch with the Cypriot style of architecture. The most prominent example is the great Latin cathedral of Famagusta (Figs. 14 and 15 and *Frontispiece*). A large portion of the nave vaulting and clerestory had been destroyed by artillery. The Turks rebuilt the vault so cleverly that no difference can now be seen. But they replaced the old traceried and gabled flying buttresses with plain ashlar masonry, and the "mouldings" of their clerestory windows are little more than a sequence of ungainly beads. At the Omerghe mosque, Nicosia, they had a more drastic problem, since most of the fourteenth-century Augustinian church out of which it was adapted had been destroyed by artillery down to window-sill level. The series of cross arches which the Turks erected to support their barn-like roof are pointed. The most characteristic Turkish addition is a minaret, usually

raised on the top of an old turret staircase. In masonry technique these are often indistinguishable from the Gothic work adjoining, and it is worthy of remark that the minaret of the seventeenth-century mosque at Kyrenia is decorated with dogtooth—a striking illustration of the contagious qualities of the Cypriot style. Nor did the Turks content themselves with merely adapting earlier Christian buildings. The mosques they built for themselves in the country villages frequently have a "western" narthex with three pointed Gothic arches. In Nicosia there are several Turkish doorways which were clearly built under Renaissance influence.

The difficulty of dating these Cypriot monuments has already been noticed, but sufficient evidence remains to prove that the style subsisted until well into the last century. The monastery at Morphou (Fig. 16), dating from about 1700, contains a loggia full of mediæval flavour, while even Romanesque survivals can be traced in the cloisters at Lambousa, which also date from the early eighteenth century. Late doorways in the Cypriot style abound in Nicosia, among which the one illustrated is dated 1738. The western door of Trimiklini church, which was built in the early nineteenth century, not only has normal Gothic mouldings, but even mediæval decorations and stops



FIG. 15.—FAMAGUSTA. ST. NICHOLAS' CATHEDRAL.

The Turks rebuilt entirely several bays of the nave vault as well as the clerestory windows

and the irregular bonding of the jambs true to mediæval practice. A similar persistence can be traced in the elaborate iconostases of the Byzantine-Venetian School, of which two are at this moment in course of execution in the traditional manner.

These few examples chosen from amongst a large number suffice to illustrate what a wealth of unusual material there is to be studied in Cyprus. The island has had a unique history, and the monuments which

have resulted contain valuable lessons for a world-wide empire like our own, which has continually to raise buildings amidst differing climates, traditions and civilisations. And the architectural importance of Cyprus is not lessened by the imminent collapse which threatens so many of her monuments. Three centuries of Turkish destruction and neglect were not ended by the British occupation in 1878. The ruins of Famagusta were used as a quarry for the mole at

Port Said. A dome in the old church of St. George of the Greeks, Famagusta, and one side of the dormitory at the magnificent monastery of Lapaïs have fallen since 1896. To-day interest has revived, but funds are lacking. Portions of St. George of the Greeks are in jeopardy, the vault of the Bedestan is ready to fall, and the romantic castle of Hilarion is literally crumbling away. The Italians are spending vast sums upon the "repair" of the fortifications, palaces and churches erected by the Knights of St. John in the neighbouring island of Rhodes—inclined, as is the Italian wont, to overpass the limits of legitimate restoration as understood in this country. Such wholesale restoration is not called for in Cyprus, but

is rather to be deprecated in some of its extravagances, such as the entire reconstruction from the foundations of the ancient cathedral at Rhodes. Yet the protection from further decay of the important ruins of Cyprus in a sound and reasonable manner practised here at our ancient abbeys, and the better handling of the cathedrals, churches and mosques still in use, are urgent problems, and all lovers of our architectural heritage must profoundly hope that these great Cypriot monuments may be preserved.

Chief books consulted:

ENLART: *L'Art Gothique et la Renaissance en Chypre* 3 vols. Paris. 1899.

JEFFERY: *Historic Monuments of Cyprus*. Nicosia. 1913.



FIG. 16.—MORPHOU MONASTERY. Showing post-Turkish work of about 1700

THE GREEK ORIGIN OF THE PANTHEON

BY PROFESSOR FRANK GRANGER

This article is the pendant to "The Parthenon and the Baroque," in the JOURNAL 17 October last year, and carries the argument of that article a stage further.

PREFACE

THE present paper will attempt to show that the design of the Pantheon was imitated from a building at Syracuse, erected about 225 B.C., by Scopinas, a contemporary of Archimedes. The evidence for this view mainly consists in a passage of Vitruvius which has hitherto passed unnoticed, because the reference to the Pantheon has been eliminated from all the printed editions of the Latin text since that of Fra Giocondo. The design of the Pantheon is fundamentally different from that of the Parthenon. They are contrasted as the "positive" with the "theatrical." The exterior of the Parthenon is directed towards obtaining a pictorial effect. The exterior of the Pantheon is that of a structure enclosing a space, and—apart from the portico which is an adjunct—is entirely determined from within.

And this interior is rightly regarded as the greatest work of art in the Roman world. Although the conception is borrowed from the Greek, the circumstance that the wooden vault was inflammable led in the event to the reconstruction of the whole building from the foundations, in order to carry the brick and concrete dome. Hence the drum itself had to be built of the same permanent materials. An unknown Roman (or Greek) engineer, following the Roman manner, gave the quality of the eternal to the three-dimensional distribution of the building. He was probably equipped for his great task by the experiments made in the erection of smaller domes at Hadrian's villa and elsewhere. But the chief cause of his success was the excellence of the cementing materials which, uniting rubble and tiles and bricks into a single mass, made of the dome a single structure, resting evenly on the drum. The columned portico and the Greco-Roman orders of the interior give a specious colouring

to the "absolute" quality of the design. Without affecting this character the interior could be entirely covered in another manner, for instance, with mosaics; in any case we might find the exterior built with a plain brick facing as in the Baptistery at Ravenna.

There is something in the domed buildings of this kind which seems to dictate a breadth and simplicity of external treatment applicable to the problems of to-day and to-morrow. Bentley, in his Westminster Cathedral, drew from such quarters inspiration for the exterior. He might have been well advised if he had allowed the interior to tell its tale outwardly in a more simple manner. (His exterior is an admirable experiment, if nothing more; an attempt to combine the "positive" with the "pictorial.") Where modern architecture has succeeded—in the Stockholm Town Hall for example—it has often been because the *expression* of the interior has dominated the exterior and limited outside ornament to essentials. The effect of this limitation has been to leave unbroken large stretches of walling, like a quiet prelude to the inner meaning of the building itself. It is this exterior reserve which adds the last touch of charm to our Norman (or as the French more rightly say) our Roman buildings, the note of permanence which can be traced back to the Pantheon itself.

The fruitfulness of the design lies in its approximation to what may be called "absolute" architecture. Hence we can trace in it the germ of Byzantine design on the one side and of Romanesque (Norman) architecture on the other. Finally, the Pantheon is the prophecy of the architecture of to-day so far as it is based on concrete.

The reader, therefore, must have patience with the special technique which is involved in my demonstration of the original meaning of the Pantheon.

THE EARLY HISTORY OF THE PANTHEON

panthium sive lacunas quod etiam in Circo Flaminio est positum Scopinas Syracusius (dicitur invenisse)—H: plinthium Joc.

Vitruvius IX, viii., 1, according to the oldest MS., the Harleian 2767, seems to furnish the first reference to the Pantheon. Fra Giocondo who has deserved so well of students by his emendations of Vitruvius, is less happy here, and his suggestion has been an obstacle repeated by later editors, to the understanding of the purpose and design of the Pantheon. In English: Scopinas of Syracuse is said to have discovered the Pantheon or "panelled vault," which also has been erected in the Circus Flaminius.

Starting then from the actual text, we may follow out the succession of clues which disclose themselves. Vitruvius quotes the Pantheon (this spelling will be used for convenience sake) as an example of the time-piece *horologium* by which the length of the day at the equinoxes and the solstices and the intervening dates, is divided into twelve equal parts: in a word it counts the hours. This purpose of the building, which a Roman guide to the building alleged to a friend of mine who visited it recently, may have been handed down by tradition, although I cannot find any other modern trace of it. Anyway the description of the Pantheon by Vitruvius

excludes the notion of a *caldarium*, or "hot room" of public baths.

The Latin synonym for Pantheon is given by *H* as *lacunae* or panelled roof. Athenæus, V, 205, in the description of a similar vaulted apartment, to which we shall recur, uses the Greek equivalent for *lacunae*: *orophōma rhombōton*, a "roof panelled in lozenge," which also we may note was of wood.

etiam also warns us that we are not dealing with the first Pantheon. This, as we shall see, was situated at Syracuse, and was imitated elsewhere than at Rome.

in *Circo Flaminio est positum*, Platner, s.v. *Circus* (*Topographical Dict.*), quotes these words, as a reference to the building itself, as though the Pantheon was in the Circus. Platner was misled by the emendation of Fra Giocondo, *plinthium* for *panthium*. To describe a dial as in *Circo Flaminio* would, of course, suggest that it was placed inside some structure. But a Pantheon is itself a building. It is appropriately described as in a region in *Circo Flaminio*, just as in another passage, IV, viii., 4, reference is made to the temple of Castor in *Circo Flaminio*. Now the Circus Flaminius gave its name to the ninth region of the city, and the Pantheon, *pantheon*, appears in the corresponding list of buildings in the *Notitia*, a document containing the regional survey of Rome and deriving ultimately from Augustus.

If the reference to the temple of Castor as being in *Circo Flaminio* had occurred alone, we might have dismissed it, with Schneider, as relating to the actual neighbourhood of the Circus itself. When however we find this second reference to the Circus, we are probably dealing with the *regio IX* in the scheme of Augustus. The names of the *regiones* may have preceded the division into regions. But Vitruvius could scarcely have written in this way much before the division itself. And this date is given by Mommsen as about 7 B.C.; it was probably some years earlier.

In the first volume of my *Vitruvius* (Books I-V, *pref.* xiv.) I was content provisionally to accept for the treatise

a date preceding 27 B.C., but qualified this by the suggestion that its publication was spread over a number of years, p. 317n. The uncertainty which hangs about the matter is illustrated by the case of the Pantheon. The omission by Vitruvius of the name of Vipsanius Agrippa who built it, like other similar omissions, is probably intentional in a work addressed to Augustus who might view with jealousy the exaltation of possible rivals. And this all the more if we connect the publication of the *de architectura* with the earliest appearance of Augustus's *index rerum a se gestarum*; an example is the famous inscription at Ancyra. If we re-examine the closing sentences of Vitruvius's preface, we shall now be able to see in Vitruvius's phrase, *pro amplitudine rerum gestarum* "corresponding to the grandeur of your achievements," an allusion to the index. Yet if Augustus viewed with suspicion the exaltation of another, it was not to advertise himself. He records in the inscription, 19-20, that he not only refrained from attaching his own name to some of his buildings and restorations, but that in some cases he concealed himself under the name of others.

But there is another point of contact between Vitruvius's *de architectura* and Augustus. In his autographs, so Suetonius observed, *vit.* 88, Augustus was not scrupulous in obeying the rules of the grammarians, but seemed to hold the opinion of those who think that written discourse should follow the custom of oral utterance. In the *Res Gestae* we find *auspiciis* for *auspiciis*, *apsenti*, *municipis* for *municipiis*, *inmisso*, *conlegio* with *collega* in the same sentence, *proeli spectaculum* for *proelii spectaculum*, and other spellings which resemble the readings of the oldest manuscript of Vitruvius (the Harleian 2767). There is reason to think that these spellings of the *Res Gestae* go back to the earliest edition produced under the eyes of Augustus himself. Hence we are incidentally justified in believing that *H* 2767, with its similar spellings, is closely representative of the original text of Vitruvius, a contemporary of Augustus.

THE PANTHEON

In the second part of this paper the starting point will be the extant building. A spherical section is furnished in the diagram. It will be observed that the dome is the upper hemisphere, and that the lower hemisphere, which is included in the drum, meets the pavement which forms a tangent to it. Hence the height of the top of the dome from the pavement is precisely equal to the width of the dome at its springing, namely, 144 feet. The careful arrangement of the dimensions suggested to me that there must be a mathematical explanation of the width of the opening. The springing of the dome, for example, marks the horizon, EI in figure 1. It is through the centre A of the circle so marked that the equinoctial and solstitial rays pass.

Vitruvius gives the rules for drawing a sundial, *analemmatos deformatio*, immediately before enumerating the different kinds of dial. And it seemed not unlikely that the diagram might assist in solving the problem.

Only those lines in the diagram are given which seem to have a bearing on the matter.

The gnomon, or rod of the dial, is represented by the line AB. In the latitude of Rome the midday shadow cast by such a gnomon at the two equinoxes would, according to Vitruvius, have a length of $\frac{1}{3}$ ths of the height of the gnomon. The length of the shadow is represented by the line BC. Taking A as centre, a circle is described with the radius AB. Let a line AC be drawn, intersecting the circumference at F and continued to the opposite side of the circle at N. Then the line CFAN indicates the altitude of the sun at midday at the two equinoxes.

In order to obtain the altitude of the sun at the summer and winter solstices, Vitruvius instructs us to strike a circle from the centre F with a radius equal to $\frac{1}{3}$ th of the circumference (24°), intersecting it at G and H. From G and H lines are drawn through the centre A to the points K and L. Then GK will give the altitude

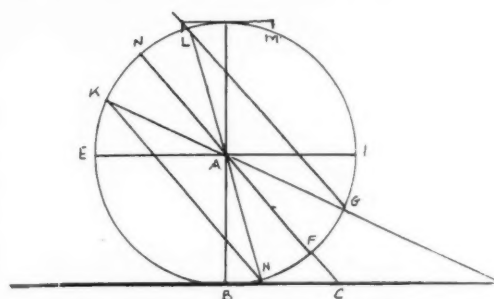


FIG. 1.—ANALEMMA: LATITUDE OF ROME

A B	Gnomon	C F A N	Equinoctial Ray
B C	Shadow	G A K	Winter Solstice
E I	Horizon	H A L	Summer Solstice

of the sun at the winter solstice and HL at the summer solstice. Vitruvius is approximately accurate. The precise inclination of the equator to the ecliptic is $23^{\circ} 28'$ as against 24° , a difference which may be neglected for the purpose of setting out the summer and winter altitudes of the sun.

It occurred to me that the intersection of the line HAL with the dome would give the width of the opening at the top. But this was not so. The width so given was far too great, as will be seen from comparing LM in the upper diagram with the opening in the Pantheon. I went over the calculations of Vitruvius again and found no serious variation for the latitude of Rome. It then occurred to me that as the Pantheon was imitated from the *heliotropion* of Scopinas at Syracuse, that the analemma set out for the latitude of Syracuse might throw some light on the matter.

Fig. 2 shows the analemma set out for the latitude of Rhodes, which differs by about half a degree from that of Syracuse. I took Rhodes because Vitruvius himself gives the relation of the gnomon to the shadow there, namely, as seven to five, IX., vii., 9. It will be observed that the sun's rays at the summer solstice pass through the lip of the opening, and through the centre of the sphere, and that this happens at no other time.

The Pantheon thus falls into line with other structures, of which one of the main purposes is to mark midsummer-day. Not far away, at Blidworth, a village in north Nottinghamshire, there are some masses of Bunter conglomerate standing alone. Through one of these a hole has been made which is said to face the sun on midsummer-day. Similar stones are found elsewhere. Attempts have been made to interpret cromlechs and circles of stones in England and elsewhere by a parallel reference to sun-worship. But it is doubtful whether these remains have any meaning beyond the sepulchre of the dead. It is even possible that many of the popular customs at midsummer, so far from explaining the origin of fire-worship as derived from popular belief, are them-

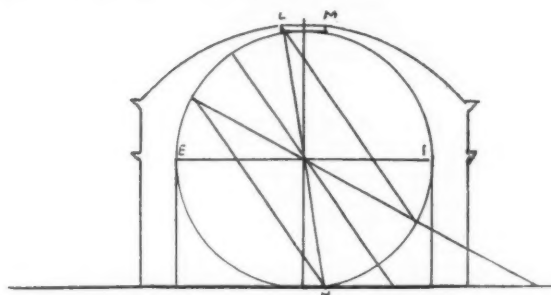


FIG. 2.—SECTION OF PANTHEON: LATITUDE OF SYRACUSE (RHODES)

selves derived from fantasy playing upon scientific observations and technical expedients, such as those with which we are occupied. At any rate, the immediate genealogy of the Pantheon takes us not to folk-lore, but to Greek precedents. But incautious imitation has its dangers. When Catania was captured in the First Punic War by Valerius Messala, he brought from Sicily a sundial which was set up against the Rostra. But owing to the difference of latitude, it did not correctly register the hours, and was replaced 99 years later, in B.C. 164, by a more correct instrument, Plin. *N.H.*, VII., 214. If the Romans endured for a century the imperfections of the town clock, we need not be surprised if in taking over the design of the Pantheon from Syracuse, they omitted to make a single necessary but less obvious adjustment.

The statement of Vitruvius that the *pantheon* was invented by a Syracusan is enriched by some striking parallels. The wealthy monarchs of later Greece, like the steamship companies to-day, had a passion for building huge ships. The monstrous vessel of Ptolemy Philopator, with its forty banks of oars, was scarcely more than a show place. Hiero II of Syracuse, however, built a ship with twenty banks of oars, and sent this (which in compliment was called the *Alexandris*) with a cargo of corn to Egypt, where there was a scarcity, as a gift along with its contents to Ptolemy Philopator, as if to advertise the skill of the Syracusan shipwrights. Athen. V. 203ff. Plut. *Dem.* 43. These huge vessels—the forty banked galley of Ptolemy has been estimated at 11,000 tons—were, like their modern successors, fitted with structures only usual on land. Ptolemy, for instance, erected an enormous dahabeeyah with domed dining-room and a domed chapel of Aphrodite with a restaurant adjoining, surrounded by a colonnade of various Indian marbles. Hiero, in his ship, provided a large lounge, *scholasterion*, with panelling and doors of boxwood, and for the roof a vault, or *polos*, imitated from the *heliotropion* at Achradina in Syracuse. Athen. V. 207. Obviously the roof could not be concave.

There was another public sundial at Syracuse. Dion is said to have advanced through Achradina, when he came to Syracuse 357 B.C., and to have spoken from the

top of a sundial high and conspicuous, erected by Dionysius, adjoining the Acropolis (Ortygia) and the Five Gates. Plut. *Dion.*, 29. But this may be neglected for our purpose. There is good reason to regard the *heliotropion* at Achradina as a structure later than this on a different site, and to identify it with the building carried out by Scopinas, who, in the light of Vitruvius's reference I. i. 16, seems to have been not earlier than Archimedes. Arguing back from the copy on the *Alexandris*, we may imagine the Syracusan Pantheon to have had a wooden dome.

There was a library in the lounge on the *Alexandris*. Athen. V., 207. This association of the library with lounges is recorded by Plutarch in the case of Lucullus, 42. Are we to argue back to the Syracusan Pantheon here also?

Let us now apply our results to the history of the Roman Pantheon. It was burned down in 80 A.D. Dio Cass., LXVI. xxiv. 2. This is comprehensible if the dome was of wood. The restoration by Domitian must have been on the original lines, for it was burnt down again under Trajan and Platner (*Topograph. Dict.* 383).

The object of the restoration by Hadrian seems to have been to secure the building against fire. Hence the dome had to be constructed of fireproof materials. This involved the reconstruction of the building from the foundations. For the walls of the drum which were adequate to carry a wooden dome, would probably be quite inadequate to resist the weight and thrust of the present materials of the dome. As against the suggestion that the original building of Agrippa was rectangular, the parallels quoted from Sicily point to the identity of the earlier circular plan with the later. It now becomes clear why the Pantheon of Agrippa is represented by a building of which the bricks from the foundation upwards bear the name of Hadrian. The fact that Hadrian's

name does not appear recalls the modesty of Augustus to which reference has been made above.

We have some reason to think that the Syracusan Pantheon was a *scholasterion*, if we argue back from the *Alexandris*; that is to say, that it was a place of resort for students, and as such it contained a library. The Roman Pantheon was similarly equipped. Between A.D. 222 and 235 Julius Africanus, the correspondent of Origen, according to a fragment of the eighteenth book of the *Kestoi*, *Pap. Oxy.* 412, designed and carried out a fine library at Rome in the Pantheon for the Emperor Alexander Severus. It is probable that this replaced an already existing library. We thus may find another point of contact with Syracuse. The use of portrait sculpture to adorn libraries was continued in the Pantheon. Africanus seems to have advised Mamaea—the autocratic mother of Severus—both in theology and in fine art. It must have been with her approval that Abraham and Christ were added to the portraits—painted or sculptured—of the imperial chapel. All these varied activities were united in the single person of Africanus, who, unlike his greater predecessors at the Pantheon, handed down his name as an architect employed on the building.

The Pantheon, therefore, is to be regarded as having a scientific rather than a religious intention. The scholastic purpose of the building, evidenced by the library, is in agreement with its astronomical uses. We do not indeed know enough of the latter to define them. It has been suggested by Mommsen that the gods of the seven planets occupied the seven niches. In this case the building might have served in some sense as a planetarium.

We can now understand the inscription on the portion which ascribes the building of the first Pantheon to Agrippa. He was a man of great scientific gifts and the Pantheon was an expression of them.

AGRIPPA, VITRUVIUS AND THE REBUILDING OF ROME

The sixth chapter of Vitruvius's first book is devoted to town-planning. It is strangely divergent from the traditional Greek and Roman treatment of this problem. Instead of laying out great boulevards and square building blocks, without reference to the winds, on a large scale as in Alexandria, and instead of following the plan of the Roman camp, Vitruvius assumes that the city walls are erected with a round contour. It would almost seem that Vitruvius would have avoided laying out a main thoroughfare directly opposite a gate so as to avoid the inrush of the wind, I. vi. 1. The walls and gates of Pompeii largely conform to his rules. Main streets do not face the Herculanean and Vesuvian Gates. Inasmuch as at Rome the Servian walls were dismantled, Vitruvius's theories had only a partial application in this respect to the regions of Augustus.

We now turn to the lay-out of the regions, and, in more detail, to Marcus Vipsanius Agrippa. This remarkable man combined in one person the general, the statesman,

the savant, the engineer—and the loyal friend of Augustus. Six words of Paternus make the picture: *uni parens . . . scientissimus . . . consultis facta coniungens*. In English: Loyal to his master alone, an expert man of science, with whom performance followed quick upon his plans.

Agrippa surveyed as an engineer, not Rome alone but the inhabited world, and made two maps: one, perhaps shaped like a sphere, within the walls of the Porticus Vipsania, the other, by way of description, on the pages of his geographical commentaries; the measurements given in the latter seem to have been plotted on the sphere. The earthly sphere answered to the heavenly sphere. The Pantheon, as we have learned from Vitruvius, served to measure time and the movements of the heavens. The statement of Dio Cassius that the domical shape of the building corresponded to the starry hemisphere is not improbable, and lends support to the hypothesis about the "orbis terrarum" in the Porticus Vipsania. However this may be, the map and the dome

were complementary and included heaven and earth. The lay-out of Rome, the centre of the world, had this background in the mind of Agrippa.

The services so brilliantly rendered to Augustus by Agrippa were cut short by his death, B.C. 12. This event left incomplete the undertakings of the minister and the plans of the *princeps*. That Vitruvius succeeded Agrippa, in part at least, may be inferred from Frontinus *Aquaed.* 25, who speaks of Vitruvius as making a change in opposition to previous custom, including that of Agrippa, a thing which could scarcely have been done if Agrippa had still been in control. Further, the phrase of Frontinus, *per Vitruvium architectum in usum urbis*, suggests that the appointment was of considerable scope. Vitruvius, the military engineer and the water engineer, might well be called into the emperor's counsels. Such is the implication of the statement of Vitruvius himself. His career, under the patronage of Augustus, included, first, the superintendence of artillery, Book I., *pref.* 2. Vitruvius was helped by the influence of the emperor's sister Octavia. Her friendship with Agrippa, *Plut. Anton.* 87, who controlled the rebuilding of the capital, may explain the appeal which Vitruvius, a subordinate of Agrippa,

made to her. At any rate the appeal had its effect. Vitruvius received a promotion which apparently was for life and accompanied by a stipend which raised him above the poverty level *eo beneficio . . . obligatus ut ad exitum vitae non haberem inopiae timorem*. *Beneficium* in the sense of "promotion" is not infrequent. "I received such promotion that I was secure from poverty for the rest of my life."

The reference to Octavia is more appropriate in form, if it is taken to have been made after her death B.C. 11, the year after that of Agrippa. In the light of these considerations, Vitruvius's work gains an official character, and may be compared in this respect to the geographical commentaries of Agrippa. It was apparently published on his assumption of office, although the collection of his material seems to have been spread over many years. That Vitruvius exercised so much influence upon the later development of Roman architecture, is therefore, no accident. His work claims to be a guide for the emperor himself in his architectural undertakings. And, in particular, *his interpretation of the origin of the Pantheon—the work of the emperor's great minister—has the authority which his official position could give.*

The Advisory Council to the Building Industry

THE FIRST ANNUAL REPORT

The following is a digest of the chief items from the Annual Report for the year 1931-1932 of the Advisory Council to the Building Industry.

INTRODUCTORY

The main object of the Advisory Council is to secure the abolition of unnecessary restrictive regulations and bye-laws which hamper building and establish in their place reasonable conditions which are in consonance with building progress. At the outset the efforts of the Council were directed principally to London where the need for revision of the enactments regulating building was pressing.

The representations of the Advisory Council were quickly followed by the London County Council setting up an advisory committee on the London Building Act, 1930, under the chairmanship of Sir Robert Tasker.

The programme of legislative reform aimed at by the Advisory Council was set out in the "Ebury Report," published in November, 1930. Some points in this programme have already been adopted in London, and it is hoped that most of the recommendations will eventually be adopted in whole or in part.

Much is hoped from the ultimate revision of the London Building Act and the standardisation in building materials and methods which will undoubtedly result. It will be the aim of the Advisory Council to urge acceptance throughout the country of an appropriate standardisation of building regulations.

The Council feels it to be its bounden duty to represent to all authorities controlling the erection of public or private buildings the necessity of examining their regulations and bye-laws with the view of eliminating restrictions that may have prevented buildings from being started or carried on.

The advance in building technique and in professional practice no longer warrants the type and form of public control which arose and was perhaps necessary in the period between 1840-1891. It has been decided to set up a Committee to

examine, investigate, and report upon the effect on the industry of the present form and extent of public control and administration, both with respect to building practice and to costs.

The general machinery of the Advisory Council is comprised of:—

(i) An Executive Committee, assisted by the (ii) Building Acts Panel, (iii) Sanitation, Plumbing and Water Installation Panel, (iv) Electrical Equipment Panel, (v) Lifts and Escalators Installation Panel, (vi) Fire Prevention Panel.

REPORTS OF PANELS

BUILDING ACTS PANEL

Chairman: MAURICE WEBB, D.S.O., M.C., F.R.I.B.A.

Terms of Reference.—"To review the existing legislation and administration under which all and every phase of building constructional work throughout the country is executed and to report: (a) As to the need of revision, and (b) the form that revision should take."

The Council having examined in detail the whole of the London Building Act, submitted to the London County Council a commentary on the Act, embodying its views and policy as far as they could be formulated at the dates in question. Among the recommendations made was one that the Code of Steel-work Practice evolved by the Department of Scientific and Industrial Research should be adopted for London. This has now been done.

A close liaison between the Advisory Committee of the L.C.C. and the Advisory Council was maintained by Lord Ebury and Mr. Louis Blanc, and is being continued with Mr. Louis Blanc.

This Panel will now consider the wider field of building legislation outside the administrative area of the L.C.C.

ELECTRICAL EQUIPMENT PANEL

Chairman: F. W. PURSE, M.I.Mech.E., M.I.E.E.

Terms of Reference.—"To review the whole of the legislation affecting Electrical Installation in buildings and to report: (a) On the need for revision thereof, and (b) the form such revision should take."

There is comparatively little legislation affecting the installation of electrical equipment in buildings, and the object of the Panel is to secure co-ordinated regulations for the proper control and administration of this branch of building equipment, at the same time ensuring that such regulations are sufficiently fluid not to act as a check on the progress of applied electrical science.

The interim report to the Executive Committee, which is printed in full in the Annual Report, indicates the line of development its final recommendations are likely to follow.

LIFTS AND ESCALATORS INSTALLATION PANEL

Chairman: E. C. HARRIS, F.S.I.

Terms of Reference.—"To review the whole of the legislation affecting the installation of Lifts and Escalators in buildings and to report: (a) On the need for revision thereof, and (b) the form such revision should take."

The object of the Panel is to formulate something in the nature of basic regulations for this type of installation ensuring that proper precautions shall be taken to protect the public.

Having regard to the special technical nature of the investigation before the Panel, a sub-committee has been formed to make a preliminary survey of the technical matters involved.

The Sub-committee is meeting regularly, and has put forward several points as interim suggestions, all of which are printed in full in the Annual Report.

SANITATION, PLUMBING AND WATER INSTALLATION PANEL

Chairman: T. A. MCINTYRE, M.R.S.I.

Terms of Reference.—"To review the whole of the legislation affecting the installation of Sanitation, Plumbing and Water Services in buildings and to report: (a) On the need for revision thereof, and (b) the form that such revision should take."

The Panel has examined the Drainage and Sanitary Bye-laws of the London County Council, and has issued a Report which appears in the Annual Report. It is now in process of examining Series No. 4 (Urban Authorities) of the Model Bye-laws issued by the Ministry of Health, and it is expected that a Report will be ready in the autumn.

The Panel has also been engaged on an investigation into what is commonly known as the "one-pipe" system of sanitation. In pursuance of this investigation two very important public discussions have been held under the Panel's auspices at the Royal Institute of British Architects. The full report of the investigations appears in the Annual Report.

The Panel has also organised, with the approval of the Executive Committee and under the auspices of the National Association of Water Users, Ltd., the opposition of the Council to powers sought by the Metropolitan Water Board with respect to the stamping and testing of fittings under clause 12 of a Bill presented by that Board to Parliament.

As a result of the opposition so organised, it can be said with truth that the powers left in the Bill are less onerous than they would otherwise have been.

The Panel has also been in negotiation with the Institute of Plumbers on the matter of the Institution of a "Minimum Code of Plumbing," and as a result of a recent conference between the Panel and a deputation from the Institute of Plumbers there is every reason to believe that the joint efforts agreed upon will be in the best interests of all concerned.

FIRE PREVENTION PANEL

Chairman: DIGBY SOLOMON, B.Sc., F.R.I.B.A.

Terms of Reference.—"To review the legislation regarding fire resisting materials and methods of construction, and the application of fire-fighting appliances to modern methods of building. Also to review the regulations regarding prevention of, and escape from, fire, including the matter of cubical contents and heights of buildings, as well as the installation of sprinklers, fire doors and shutters."

The Panel has held fourteen meetings, and has produced a Report, printed in full in the Annual Report, on Fire Prevention and on the means of escape from fire in buildings.

This Report has been forwarded to the Advisory Committee of the London County Council.

This Panel is now dealing with the complicated matter of the effect of Fire Insurance regulations on the practice of building.

The Panel finds that the absence of defined regulations in London governing means of escape in case of fire tends to increase the difficulties of architects in the matter of design, and to delay the preparation of plans. It considers that the whole of the administration of the regulations governing this particular subject calls for simplification and that regulations should be drafted in such a form that they can be applied as broad principles in design rather than as hard and fast requirements.

It has, therefore, considered the London County Council statement of general requirements to see if it would not be possible to get out a formula as to what would be considered suitable exits under varying conditions.

CONCLUSIONS

Over and above the work of the Panels the Council has kept in close touch with the Ministry of Health and to some extent with the Corporation of the City of London. The Executive Committee has kept in mind the view that its object can only be attained by the most harmonious association with the bodies in whom the duty on building administration is vested. The Council is working in complete harmony with all other efforts that are being made to improve the general conditions of the building industry. It is desired in this respect to refer especially to the work of the Building Industry Council of Review, whose offices the Council shares.

It is realised that the task before the building industry requires, and justifies, all the effort that can be made on its behalf, and in this respect the Council will always be most happy to render any assistance, and join in any effort, having for its end the common one of the betterment of the industry and the well-being of the country as a whole.

The Executive Committee has consistently kept in view the paramount interests of the building owner and it is the intention of the Executive Committee to make such arrangements from time to time as will enable the considered views of the Associations of Building Owners that are members of the Council to be given the fullest consideration. In the type of work undertaken by the Council, it is essential that recommendations made to the various governing authorities should be based, not only on the best in the way of technical knowledge but upon both the experience and requirements of the building owners of the country, with whom, after all, rests the great responsibility of making buildings pay. Modern commercial and industrial conditions are such that only by the closest co-operation between the representatives of the building owners and the building industry will the greatest possible degree of mutual benefit be obtained.

Reviews

PHILOSOPHER-ARCHITECTS.*

WILLIAM G. NEWTON.

When philosophers venture upon theories of art we are apt to feel that they are sparring at a shadow. However great their analytical skill, however closely reasoned their conclusions may be, they lack that intimacy with the subject they are discussing which only the practice of an art, with its daily struggles, can bring. They often seem to be arguing very persuasively, but not about art. On the other hand, the working artist has not generally developed powers of mental analysis. He does, but asks not why, unless he be a Leonardo or a Reynolds. But the architect-philosopher is not so rare. Every day he is analysing in order to create. With the material to be discussed he is familiar; nor is he altogether ill-equipped to relate that material with a larger scheme and construct a philosophy of his art.

His fellows will applaud his venture, but we all know the pitfalls. There is a danger that theory may become master instead of guide. General principles are a valuable background, as is a building committee, but both should be treated with the same tactful firmness.

Three of the books before us are by architects; and we shall be grateful to them for bringing out, each in his own way, the significance of the work we do and its place in the general scheme of life; a point of view which is emphasised for us once again by the reprint of March Phillipps's *Works of Man*. For him indeed the whole interest of art is its value as the expression of human life and character. "Through the study of art we enter into the thoughts of mankind." The difficulty of such a study is that we are apt to form our mental picture of other times and other peoples from our views of their art, and then use these preconceptions to help us decide that their art exactly expresses their ways of looking upon life. From this fallacy of assuming his conclusion as his major premise, March Phillipps is not altogether free. Some to-day will wish to quarrel with his low estimate of Egyptian sculpture as compared with the Greek; but the most modern will no doubt be pleased to remember that, twenty years ago, he could write "form is function, and in western art, at least, no other law of origin is admitted"; and all will be delighted to renew their acquaintance with his

gift of vivid summary. "Sta Sophia is a Greek comment on Roman architecture." "Gothic is less a style than a fight." The Egyptian peasant "sows his seed and runs home to whet his scythe."

Our architects can hardly hope to compete in a like agility of phrase. Mr. Goodhart-Rendel comes the nearest. In his *Vitruvian Nights*, which comprise a number of papers written at different times and for different occasions, he darts like a dragon-fly; but his flights of fancy are often both shrewd and wise. On the subject of the artist as pioneer, he says that what matters is not who did it first, but who did it best. And he sanely underlines a point which is made by both the other writers under review, that the wishes and prejudices of the client are part of the architect's programme. "The average man does not really want his house to be any more novel than his trousers." And he is surely very right in saying that "continuity is, and has long been, the most urgent want of British architecture."

It is interesting to note how the repressions of the stern Victorian creed are now working themselves out, in those who are old enough to have been influenced by them in their youth, in a kind of flippancy, almost a naughtiness of theory. How anxious Mr. Butler is that it should not be supposed that truth has anything to do with architectural worth, or that his delight in Lincoln nave on a sunny afternoon has in it any infection of mid-Victorian romance. Nor will Mr. Goodhart-Rendel allow that architecture is anything more than the "art of building agreeably." Of course this is a vague enough phrase and the meaning of agreeable will stretch to fit the critic's reaction. Could we not now forget our Victorian repressions, and allow, with Sophocles, that there is something a little wonderful about man's handiwork, who tames the sea and the land and learns how to dwell in cities?

Mr. Butler's book is now in its second edition, and has evidently found a public. He employs two methods of dealing with his problem, which is to display the substance or meaning of architecture. He makes a philosophical attempt to analyse by abstract definitions (that architecture, for example, is enduing a building with an appearance of vital stability, duly emphasised by significance), and he explains his meaning by a series of closely reasoned descriptions of buildings or parts of buildings. This last is done very well. There is great sympathy and understanding, and often an admirable justness of phrase in his discussions of the Cluny dormer, Palladio's Loggia Bernarda (wanting but the mayor on

**The Works of Man*. By L. March Phillipps. London: Duckworth. 2nd edition. 1932.

The Substance of Architecture. By A. S. G. Butler. London: Constable. 2nd edition. 1932.

Vitruvian Nights. By H. S. Goodhart-Rendel. London: Methuen. 1932. 7s. 6d.

Modern Architectural Design. By Howard Robertson. London: The Architectural Press. 1932. 12s. 6d.

the balcony as the final touch to the composition), a glimpse of York Minster, the section through Bourges Cathedral, "loutish" St. Front of Perigueux, the Bourse at La Rochelle, and the slow and magnificent climax of Kedleston's plan. All these are of high interest; and they are valuable, too, for the various lights they throw on the theory he enunciates.

But for the planning of his argument he seems to want a colder intelligence. To say that the abstract meaning of the word "building" may be described quite plainly as the act of putting up what is generally known as a building, is to advance us inappreciably. To say that a keystone is a little less definitely practical than a door, because we needn't have arches as often as we must have doors, is to say that a coffin is less practical than a chair. To say that appreciation of the appearance of Palladio's Loggia is not stimulated by its truthfulness, by which in the context he means that he would appreciate the qualities of the exterior, whether they were or were not an expression of the plan, seems to be contrary to all architectural teaching to-day, and to conflict with his own later chapters.

In general, we should be inclined to agree that his description of architecture as "that arrangement of the lines of building, which, controlling by reason the practical matter and by taste the æsthetic affair, mixes the two in their due relation and thereby forms a successful blend" is adequate so far as it goes, but it seems to be

concerned too much with a flat face and too little with the massing wrought by plan and by section. In his discussion of individual buildings Mr. Butler shows that he has a much deeper conception of architecture than his definition implies. The analysis seems to be more sterile than the instances. The philosopher lags behind the artist.

Mr. Howard Robertson has a less ambitious plan. His is not a book of theory, reinforced by instances, but his chapters discuss, in due order, the various types of problem which the architect has to face, and it is out of his solutions or suggestions in each case that his philosophy may, piece by piece, be put together. Mr. Robertson is one of the few who can walk with Mendelssohn nor lose his common sense. His is a massively sensible outlook, freshly aware of new problems and new opportunities, yet by no means to be stampeded into thinking that the problems of architecture are fresh, like the laundry, every Monday morning. He has studied with critical insight much European work, and has many wise things to say about the claims of structure, function and materials. He sums up what is no doubt a provisional creed by saying that "the real contribution of modernism resides in a revived conception of orderliness."

A conclusion so aseptic can hardly mislead us in our struggles. If it beckons to no glory, at least it should keep us on the road.

TWO NEW BOOKS ON ACOUSTICS.*

REVIEWED BY P. W. BARNETT, A.R.I.B.A.

These are two important contributions to the rapidly growing volume of literature which deals with the science of sound and its application to the acoustic problems of the architect and engineer.

Mr. West's book is not intended for the architect in practice requiring guidance as to how to apply directly the scientific principles governing good acoustic conditions in buildings. It explains, in a commendably lucid manner, the theory of sound and its application to telephone engineering and to acoustical measurements and research. It has been written as a textbook for the engineer and student-engineer already equipped with some mathematical knowledge, and, in meeting their needs, it fills a gap in the literature of acoustics and forms a valuable and well-timed addition to the Pitman "Specialists' Series" of textbooks.

The aim of Professor Knudsen's work, on the other hand, has been to provide a book of reference for the practising architect and a textbook for the architectural student. That it will become a standard work of refer-

ence in the architect's office and a much-studied textbook in the Architectural School there can be no doubt. In this field of publication Professor Knudsen is not quite a pioneer, and he himself handsomely acknowledges the advantages which have accrued to him on this account. He turns these advantages over to his readers with interest on a generous scale.

After a brief historical introduction, which is of importance in indicating the state of knowledge on the subject before its intensive investigation by Wallace Sabine and his followers, the book is divided into three main sections: (1) Physical and Physiological Acoustics (3 chapters), (2) Fundamental Principles and Data (12 chapters, of which no less than 5 are devoted to sound insulation), and (3) Application to Building Design (8 chapters). If, very occasionally, the non-mathematical reader meets an obstacle recognised as "Calculus," he may slip around it without fear of missing the path beyond. The collection of absorption and insulation data in Part 2 is about as complete as it is possible to make it: by classification into types ready reference remains practicable. In Part 3 the application of the fundamental principles to all kinds of room is discussed, a chapter being devoted to each type. The concluding portion of

* *Acoustical Engineering*. By W. West, B.A. (Oxon.), M.I.E.E. London: Sir Isaac Pitman and Sons, Ltd. 1932. 158.

Architectural Acoustics. By V. O. Knudsen, Ph.D. London: Chapman and Hall. 1932. 408.

the book comprises a series of problems, two appendices (of which one is a helpful list of definitions), and the index.

The volume necessarily approaches the monumental in proportions, but the immense amount of information and data it contains has been presented in such an orderly and generally attractive manner that, after reading it from the first page to the last in two or three sittings, I was almost regretful that the author had succeeded in

dealing comprehensively with his subject in a mere six hundred pages. This is saying a good deal. It may be taken to signify that, quite apart from Professor Knudsen's literary accomplishment, he is particularly well endowed with the gift, still too rare amongst scientists, of getting scientific knowledge across to the practitioner in a manner which leaves the latter no excuse whatever for failing to apply, to the general benefit, the results of scientific research.

SOME BOOKS ON TIMBER

THE TIMBER OF HOME-GROWN SCOTS PINE

Department of Scientific and Industrial Research Forest Products Research Bulletin No. 15. H.M.S.O., 5s.

The Department of Scientific and Industrial Research has issued today a Forest Products Research Bulletin dealing with the timber of Home-Grown Scots Pine. As a result of a careful series of investigations it is stated that "a quantity of home-grown scots pine timber equal to that of good quality imported red or yellow deal of joinery grade can be produced in this country, but the rate of growth must not be excessive, i.e., the timber should contain on an average 12 rings or over per inch radius."

Timber grown in different localities varies considerably in weight and ranges from 25 lb. to 45 lb. per cu. ft. at a moisture content of 12 to 15 per cent. The darker colour of the heartwood, which is an indication of durability, is more marked in the home-grown than in the imported timber, while the percentage of heartwood is dependent on locality and age.

The home-grown timber seasons without difficulty both by air-drying and kiln processes, the only serious defect being the occurrence of a blue stain in the sapwood which can be largely guarded against by proper ventilation in piling. "A kiln with forced circulation is essential if the quickest and most economical results are to be obtained. The main difficulty likely to be experienced is in drying inferior quality material due to distortion on account of irregular grain and to some loosening and cracking of the knots." Detailed recommendations regarding the most suitable seasoning treatments are given in the Bulletin.

"The results of the tests on clear material indicate that home-grown scots pine has fair mechanical properties, in mean value slightly below the best imported timber from the Baltic and White Sea ports." Locality, however, must be largely taken into consideration. "Thus the Bedgebury (Kent) and Walcott (Shropshire) material was in general value equal to the imported timber, that from Lock Tay (Perthshire) very slightly inferior, and that from Weasenham (Norfolk) slightly inferior to the other three." The home-grown timber is harder by about 30 per cent. than the imported timber. "This quality is of importance," the Bulletin points out, "for certain uses, such as flooring and sleepers, and has also to be taken into consideration when estimating the machining qualities of the wood."

As regards preservative treatment, the home-grown timber readily absorbs creosote, but uniform penetration is often not obtained owing to excessively rapid absorption by the sapwood. Methods are suggested in the Bulletin for overcoming this difficulty. The heartwood of scots pine is durable in dry situa-

tions and the sapwood is moderately durable under cover. Well treated with creosote the sap and heartwood both last, even as posts or poles in the ground, for 40 years or more.

Woodworking tests indicate that the home-grown timber is fairly easily worked and can be finished to a good surface, very little inferior in finish to that obtained with the imported material.

In dealing with the utilisation of the timber the Bulletin states that fellings during and immediately after the War depleted many of the choicest stands of timber in this country and this makes it the more imperative to replace the supplies. In doing so one of the most difficult problems will be to find a market for the smaller thinnings. Pit props and pitwood are at present the chief outlet. "It will certainly be necessary to explore other possible markets to absorb the large quantities of small sizes which will be forthcoming, taking into account the extended plantations at present being created in Great Britain." Possible outlets suggested in the Bulletin for such timber include its use for composition boards, craft paper, cardboards, wood wool, kindling wood, creosoted fencing posts and rails, hurdles, etc. At present home-grown scots pine is used to a very limited extent for building purposes, since the timber is not available in the longer lengths generally required. The mature timber of shorter lengths is in more common use for sleepers, sawn colliery timber, barrel staves and heads, crates, box-making, etc.

INSECT DAMAGE TO TIMBER

A SURVEY OF THE DAMAGE CAUSED BY INSECTS TO HARDWOOD TIMBERS IN GREAT BRITAIN. Department of Scientific and Industrial Research, Forest Products Research Bulletin No. 13. H.M.S.O. 1932. 2s. 6d.

SUMMARY OF FOREST PRODUCTS RESEARCH BULLETIN NO. 16. A Survey of the Damage Caused by Insects to Hardwood Timbers in Great Britain. H.M. Stationery Office. 2s. 6d. net.

This Bulletin gives the results of a Survey of the Damage Caused by Insects to Hardwood Timbers in Great Britain. The losses incurred through the attack of beetles, mainly *Lyctus* Powder Post beetles, by all branches of the hardwood timber trade are increasing and the problem needs urgent attention. It was felt that a knowledge of present conditions was essential before suitable methods of control could be considered. Such information is supplied in detail in the Bulletin. Preventative measures recommended by the Forest Products Research Laboratory are also described.

In carrying out the Survey, docks and timber storage wharves were visited at all the chief timber ports, and, in addition, timber was inspected on the premises of 333 importers,

merchants and manufacturers in all the chief timber using centres in England and Scotland. During the inspection, careful note was taken of all *Lyctus* infected timber observed, including details of its origin, length of time in yard, and date of arrival at port of entry. Any signs of damage by other wood-boring insects was also noted.

Lyctus Powder Post beetles take their name from the manner in which their larvæ reduce the soft outer layers or sapwood to a fine flour-like powder. The eggs are laid in the pores of recently or partly seasoned hardwoods such as oak, ash and walnut. On hatching the grubs tunnel through the wood, feeding and growing from about March to October. This damage may not be detected, however, until the first of the fully grown beetles bores its way out about a year after hatching. Small piles of wood-dust found amongst a pile of timber are a sure sign of *Lyctus* infestation. The beetles are about one-sixth of an inch long and are able to fly, thereby extending the range of their attack to neighbouring piles. This factor is of especial importance in cases where importers and merchants use large communal storage yards.

A number of cases of infestation in notable new public buildings have also been dealt with by the Laboratory. The difficulties thus encountered are considerable as infestation is rarely detected until a year or more after the completion of the building.

The Forest Products Research Laboratory considers that immediate steps should be taken to control the spread of *Lyctus* beetles in this country. Co-operative action by all trades concerned would result in a widespread demand for wood guaranteed kiln-sterilised or otherwise free from attack. The Bulletin contains reliable information on the *Lyctus* problem and recommendations of value to all trades anxious to diminish the serious losses caused by timber beetles.

The Bulletin also gives details of the type of injury caused by other insects. Unlike *Lyctus* beetles, these insects do not survive the seasoning of the timber. Pinhole-borer damage is next in importance and is sometimes confused with that due to *Lyctus*. The types of injury caused by wood-boring insects and methods of differentiating between them are tabulated in an Appendix to the Bulletin. Timber users will find this of particular use and value.

EMPIRE TIMBERS

EMPIRE TIMBERS FOR STRUCTURAL DESIGN. *British Columbia Douglas Fir*. Department of Scientific and Industrial Research: Forest Products Research. By C. J. Chaplin. Lond.: H.M.S.O. 1932. 6d.

This pamphlet draws attention to the important developments that have taken place within the last few years in the grading of structural timbers in British Columbia, which is probably the most important source of softwood structural timber in the Empire.

"Considerable progress," says the pamphlet, "has been made in the classification of the material providing a basis for the standardisation of grades to give dependable uniformity. This closer selection of timber with reference to the occurrence of defects both natural and accidental leads to greater ultimate economy through the use of smaller sizes and longer spans. Probably no other timber has received the same attention as has Douglas fir, for its characteristics have been studied exhaustively in the Forest Products laboratories of Canada and of the United States of America, while its application in in-

dustry has been systematically developed by the technical departments of several commercial associations. The increasing demand for Empire timbers for general use in Great Britain has encouraged the production of special classifications of British Columbia timbers, and quite recently new grades of Douglas fir have been standardised to meet the particular needs of this market."

These new grades are marketed under the name "U.K. Merchantable." The dimensions of the cross-section of any piece of the new grades are in each case $\frac{1}{4}$ -inch less than the nominal size of the foreign red or yellow deal with which the timber competes. Figures, obtained at the Forest Products Research Laboratory at Princes Risborough, are given in the pamphlet which bring out clearly that, as the result of the greater fibre strength of the Canadian timber, the dressed sizes are considerably stronger than the full size piece of red or yellow deal. Besides being stronger the timber is also stiffer than its foreign competitors.

To assist those who wish to employ Douglas fir as joists or rafters in building construction, tables are included in the pamphlet giving safe loads for each of a number of sections supported on varying spans. The loads are given for uniform loading and represent the total load of the spans. Three groups of tables give the safe loads for three different exposures, representing the liability of the timber to absorb moisture from being wetted after having been placed in position.

WOODWORKING

THE PRINCIPLES OF WOODWORKING. *A Survey of Present Knowledge on this Subject*. Forest Products Research Bulletin No. 13. H.M.S.O. 25. 6d.

The Forest Products Research Laboratory of the Department of Scientific and Industrial Research has just issued a Bulletin on "The Principles of Woodworking," as a preliminary to investigations on the machining properties of timber. To deal with the increasing variety of Empire and other timbers, some specific method of determining the working and finishing qualities of a wood was required. It was found, however, that a knowledge of the fundamental woodworking process was the first essential in the problem. The principles underlying the reaction of the wood to the tool are dealt with in detail in the Bulletin.

BUILDING MECHANICS

APPLIED BUILDING MECHANICS. By Arthur D. Turner. Bristol: Wright, 7s. 6d.

Mr. Turner's *Mechanics of Building* which was published some time ago is well known. In the present book he has "applied the principles outlined in his earlier work to as large a variety of present-day problems as is possible." By producing the book as a text book for students the author is hiding his light under a bushel, since the close attention paid in every page to the problems of everyday practice makes the book of general service to architects.

There are valuable sections on timber roofs and shoring. Steel construction, of course, receives the lion's share, but masonry and brickwork construction are considered at length with useful examples of brick domes. In the concrete section there are examples of retaining walls, arches and domes, and a special part dealing with tanks and silos. The book ends with an analysis of the construction of several notable modern buildings and tables of data.

DEVON

DEVON: A SURVEY OF ITS COAST, MOORS AND RIVERS. Prepared by W. Harding Thompson, F.R.I.B.A., for the Devon Branch of the Council for the Preservation of Rural England. University of London Press, 1932. £1 1s. 0d.

Reviewed by C. LOVETT GILL [F.]

Books dealing with Devonshire have a wide appeal, more especially to those who were born within its boundary, and Mr. Harding Thompson's Report on Devon, recently published by the C.P.R.E., is a wonderful collection of all that appertains to the county.

Having a somewhat intensive knowledge of the county, I am astonished at the mass of information that has been collected, tabulated, and reduced to order, so that with the indices given any one can find what he requires without effort.

The provision of six large-scale folding maps showing various details, such as Contours and Antiquities, and special districts such as Lynton and Neighbourhood and Dartmoor, etc., enable a reader to grasp at a glance what the author wishes to point out. The excellent photographs, not a few of which have been taken by the author, have been well selected and beautifully reproduced; they illustrate, as no other method could, the point of view put forward as worthy of special study.

A copy of the book should be on the shelves of all public bodies in Devonshire as a guide for avoiding the mistakes of the past, the value of what they possess, and suggestions for their guidance in future development.

The title of the book gives its particular subject, namely, "Rural England," but the towns and villages have not been omitted, and a goodly list of all that is worth preserving in them has been given, with some typical village plans. One hundred and three bridges are mentioned and a number illustrated; there is also a list of birds to be found in the county, and a census comparison for the last two decades; in fact, the thoroughness makes one feel that all the guide books have been rolled into one.

Suggestions are put forward for future development which are clearly stated and reasoned why; a few more photographs might have been given of the bad or ugly as an aid to education in what to avoid.

There is but one suggestion, and that is that windmills should have been mentioned. The stone shaft of one stands on

Churston Common, modelled on the lines of those in the Channel Islands, and one remains at the back of Paignton; there are no doubt others in the county.

With such a work as this it will be fairly simple to add, in a future edition, any buildings of historic interest that may have been omitted, and perhaps some illustrations might be added of the room over the porch, which is a typical feature of some of the inns, notably the Salutation Inn at Topsham and the Seven Stars at Totnes. And one small correction:—I believe that on page 80, No. 1, not No. 2, Albemarle Villas would be correct.

A TEXT BOOK OF BUILDING SCIENCE.

BUILDING SCIENCE. By F. L. Barrow, M.Sc., A.M.Inst.C.E. Lond.: Longmans Green, 1932. 4s. 6d.

Reviewed by T. E. SCOTT [F.].

The title of "Building Science" is one that is used to embrace a very wide range of subjects, and its scope varies considerably in almost every case. The book under review is apparently intended for students of Building, although most of the information should be very valuable to students of Architecture, particularly those who are studying for the Intermediate Examination; it deals with simple Theory of Structures, and the properties of Building Materials.

The book is one that might be strongly recommended to the type of student referred to, since it provides a very sound introduction to the study of certain aspects of architectural practice, and should enable him to approach intelligently the study of building materials, instead of being compelled to take for granted the properties usually ascribed to various materials without knowing exactly why.

The chapters dealing with the Theory of Structures are complete and sufficient within the scope of the book, but those dealing with the properties of Building Materials might well have been amplified considerably so as to constitute a complete study of all materials whose physical and chemical properties affect their uses for building purposes.

It is very interesting to learn that certain of the results of the work of the Building Research Station are being passed on to students: it is to be hoped that reprints of the book will also take account of the invaluable information that subsequently becomes available from that source.

ACCESSIONS TO THE LIBRARY

1932-1933, I

6 OCTOBER TO 8 NOVEMBER 1932

INCORPORATING NOTES ON RECENT PURCHASES

These Notes are published without prejudice to a further and more detailed criticism.)

Lists of all books, pamphlets, drawings and photographs presented to, or purchased by, the Library are published periodically. It is suggested that members who wish to be in close touch with the development of the Library should make a point of retaining these lists for reference.

Books presented by Publisher or Author marked

R.

Books purchased marked

P.

* Books of which one copy at least is in the Loan Library.

[In addition to the accessions published below, a considerable number of extra copies of books in constant demand has been added to the Loan Library.]

ARCHITECTURE

REILLY (C. H.)

The theory and practice of architecture. (The Outline series, 2nd ed.)

6½" x 4¾", 144 pp. Lond.: Victor Gollancz, 1932. 1s. 6d. P.

BRISTOL: PUBLIC LIBRARIES

Architecture. Books in the Bristol P—L—.

pam. 7½" x 4¾", + pl. [Bristol, 1932.] R.

PROFESSIONAL PRACTICE

DAVIS (R. W. J.)

Specifications and specification writing. (Directly-useful technical series.)

8½", xiii + 93 pp. Lond.: Chapman & Hall, 1927. 6s. P. 1/2.

PALMER (H. S.)

The Law of arbitration and awards.

8½", xx + 160 pp. Lond.: Pitman, 1932. 6s. P.

HISTORY

NEWCOMB (REXFORD)

Outlines of the history of architecture. Part I: ancient architecture.

Revd. ed. 10½" x 8¼", x + 176 pp. incl. maps, etc. N.Y.: J. Wiley & Sons, 1931. R.

WICKHAM (A. K.)

The villages of England.

9". xii+52 pp.+pls.+map. Lond.: Batsford. 1932. 12s. 6d. R.

ROYAL COMMISSION ON HISTORICAL MONUMENTS, ENGLAND.

An Inventory of the historical monuments in Herefordshire.

Vol. ii—East.

10½"×8½". xxxii+266 pp.+fr.+190 pls. Lond.: H.M.S.O. 1932. £1 10s. R.

TOTTEN (G. O.)

Maya architecture.

[2nd ed.] 16". 250+(1) pp. Washington: Maya Press. [1928.]

Presented by the Author, A.I.A.

BRIGGS (M. S.)

The Homes of the Pilgrim Fathers in England and America (1620-1685). [Timber construction, etc.]

9". xvi+211 pp.+pls. Lond.: O.U.P. 1932. 18s. R. & P.

RODD (SIR RENNEL)

Rome of the Renaissance and to-day.

10". x+304 pp.+pls. Lond.: Macmillan. 1932. £1 5s. P.

BLOMFIELD (SIR REGINALD)

*Memoirs of an architect.

8½". xiii+314 pp.+ (4) pls. Lond.: Macmillan. 1932. 10s. 6d. R.

LOGHEM (J. B. VAN)

Bouwen, Bauen, Bâtir. Building. Holland.

9½"×7½". 144 pp. incl. pls. Amsterdam: "Kosmos." 1932. £1 2s. 6d. R.

BARR (A. H.), *junr.*, AND OTHERS

Modern architects.

10". 199 pp. incl. pls. N.Y.: W. W. Norton. [1932.] 18s. 6d. R.

DRAWING

HIGGINS (WALTER)

Pen practice.

pam. 7". Lond.: Batsford. 1932. 1s. 6d. R.

VOCATION

MINISTRY OF LABOUR

Architecture. (Choice of career series, No. 5.)

pam. 9½". Lond.: H.M.S.O. 1932. 2d. R.

BUILDING TYPES

DISTEL (HERMANN)

Krankenhäuser. W. Hegemann, ed.

12¼"×9½". 80 pp. Hellerau: Jakob Hegner. [19—.] 15s. 6d. P.

SWEDEN: STATE MEDICAL BOARD

Notes on the organisation and planning of public hospitals in Sweden. (Communication No. 69.)

pam. 9½". Stockholm. 1931. 3s. P.

Sketches and plans of hospitals in Sweden.

9"×7". 102 pp., incl. pls. and folded pls. Stockholm. 1931. 3s. P.

GREENWICH AND LEWISHAM ANTIQUARIAN SOCIETY

Transactions . . . for 1924. Vol. iii, No. 1. [Containing: Building the Royal Hospital at Greenwich.]

pam. 8½". Lond. 1924. 5s. *Presented by Mr. A. D. Sharp.*

MINISTRY OF HEALTH

The purification of the water of swimming baths.

pam. 9½". Lond.: H.M.S.O. [1929.] 1s. R.

ARCHITECTURAL FORUM, *journal*

*Theater reference number. (Sept., Spec. No.) [With bibliog., p. 12.]

12"×9". N.Y. 1932. 15s. P. (2).

REY (RAYMOND)

Les Vieilles églises fortifiées du midi de la France.

10". 241 pp.+xxiv pls. Paris: Henri Laurens. 1925.

Presented by Sir Henry Gooch.

FINNY (W. E. ST. LAWRENCE)

[Kingston-on-Thames, its Ch. of All Saints, and the Saxon Church.]

3 pams. 19[27]-30. *Presented.*

SAYER (JOHN)

Charing Church. (From *Archæologia Cantiana*.)pam. 8½". Lond. 1885. *Presented by the Librarian [A.].*

FARMER (O. G.)

Fairford Church and its stained glass windows.

2nd ed. pam. 7½"+pls. Fairford. 1928. *Presented.*

MESSENT (C. J. W.)

*The City churches of Norwich.

pam. 7". Norwich: H. W. Hunt. 1932. 2

Presented by the Author [A.] [1]

AUBERT (MARCEL)

Senlis. (Petites Monographies des Grands Edifices de la France.)

8". 144 pp.+plan. Paris: Henri Laurens. 192

Presented by Mr. H. M. Fletcher [F]

REY (RAYMOND)

La Cathédrale de Cahors et les origines de l'architecture à coupoules d'Aquitaine.

11". xxii+247+(1) pp.+4 plans. Paris: Henri Laurens. 192

Presented by Sir Henry Gooch

HODGES (C. C.)

The Abbey of St. Andrew, Hexham.

pfo. 22½". (2) pp+60+(3) pls. Priv. prin. 1880

Presented by Mr. W. J. Wilson [L]

INDUSTRIAL HEALTH RESEARCH BOARD, formerly INDUSTRIAL FATIGUE RESEARCH BOARD

A Study of heating and ventilation in schools. By H. M. Vernon and T. Bedford (assisted by C. G. Warner).

pam. 9½". Lond.: H.M.S.O. 1930. 2s. 6d. P

BOARD OF EDUCATION

School buildings: economy in construction. (Circ. 1419.)

pam. 9½". Lond.: H.M.S.O. 1932. 2d. P

GRAY (J. M.)

The School of Pythagoras (Merton Hall), Cambridge. (Cambridge Antiqu. Soc., Quarto Pubns., N.S., iv.)

11¼"×8¾". (viii)+69 pp.+iii pls.+ii plan

Camb.: Bowes & Bowes. 1932. 12s. 6d. R

BRITISH BROADCASTING CORPORATION

*Broadcasting House.

9¾"×7¼". 30 pp.+var. pls. Lond.: B.B.C. 1932. 5s. R. & P

GOTCH (J. A.)

*The Growth of the English house.

8". viii+336 pp.+pl. Lond.: Batsford. 192

*Presented by Mrs. C. Owen Barr*VETTER (H. A.), *editor*

Kleine einfamilienhäuser.

11¼"×9". xii+107 pp.+3 pls. Vienna: Anton Schroll. 1932. 17s. P

FRANK (JOSEF), *editor*

Die Internationale werkbundsiedlung, Wien 1932. (Neues bauen in der welt series.)

11"×8¾". 22 pp.+pls. Vienna: Anton Schroll. 1932. 15s. P

COUNCIL FOR THE PRESERVATION OF RURAL ENGLAND

*[Memoranda:] No. 26. Rural housing. By Percy Morris.

pam. 9½". Lond. 1932. 3d. R

TAUNTON: SOMERSET RURAL COMMUNITY COUNCIL

Old cottages. Practical notes on their care and enlargement.

pam. 8½". Taunton. 1931. 1s. R

CHATTERTON (FREDERICK), *editor**Small houses and bungalows. 1932. *Presented by Mr. C. Rowe*

DETAILS

GALE (C. H.)

A New method of setting out the Ionic volute by arcs of circles. pam. 8½". Priv. prin. by au.: Stuston Lodge, Diss. (1932.) 1s. 6d. R

In this pamphlet the author describes in clear language

illustrated by excellent diagrams, a method he has devised

setting out an Ionic volute so that many of the inaccuracies

some of the accepted methods may be avoided.

SCHNECK (A. G.)

Schränk, tisch und bett. [Cupboards, tables and beds.] (Die Möbel als gebrauchsggegenstand series, 2.)

11¼"×9". 80 pp. Stuttgart: J. Hoffmann. [1932.] 15s. P

ALLIED ARTS

BEAZLEY (J. D.) AND ASHMOLE (BERNARD)

Greek sculpture and painting to the end of the Hellenistic period.
8" x 6". xix + 107 pp. + pls. Camb.: U.P. 1932. 10s. 6d. R.

SWARTWOUT (R. E.)

The Monastic craftsman . . . services of monks to art . . .
8½" x 5½". (vii) + 198 pp. + viii pls. Camb.: W. Heffer. 1932. 10s. 6d. R.

RICHARDSON (A. E.)

*Georgian England. . . .
9". viii + 202 pp. + xciii pls. Lond.: Batsford. 1931.
Presented by Mr. C. Rowley.

EDWARDS (E. B.)

Dynamorhythmic design. A book of structural pattern.
10½" x 7½". xx + 122 pp., incl. pls. New York: Century Co. 1932.
£1. P.

NATIONAL PORTRAIT GALLERY

Catalogue.
6½". xxiii + 391 pp. + xlv pls. Oxford: U.P. 1932. 1s. 6d. P.

BUILDING

JAGGARD (W. R.) AND DRURY (F. E.)

*Architectural building construction.
Vol. i, 3rd ed. repr., 1932; vol. ii, pts. i & ii, repr., 1932.
3 vols. 8½". Camb.: U.P. 1932. 7s. 6d., 12s. 6d., 12s. 6d. P.
Displaces old ed. for the Loan Library.

BARROW (F. L.)

*Building science.
7½". vii + 235 pp. Lond.: Longmans, Green. 1932. 4s. 6d. R. & P.

STRUCTURAL MECHANICS

BRITISH ALUMINIUM COMPANY

Aluminium sections in architecture.
pam. 9" x 7". Lond. 1932. R.

MATERIALS

SCIENTIFIC AND INDUSTRIAL RESEARCH, DEPT. OF

The Investigation of atmospheric pollution. Report on observations. . . . 19[30]-31.
pam. 11" x 8½". Lond.: H.M.S.O. 1931. 5s. 6d. P.

SCIENTIFIC AND INDUSTRIAL RESEARCH, DEPT. OF: FOREST

PRODUCTS RESEARCH
Empire timbers for structural design. British Columbia Douglas fir. . . . By C. J. Chaplin.
pam. 9½". Lond.: H.M.S.O. 1932. 6d. R.

HYDE (H. A.)

Welsh timber trees, native and introduced. (National Museum of Wales.)
8½". viii + 107 pp. + xxv pls. Cardiff. 1931. 1s. R.

MANCHESTER: M—ARCHITECTS' AND BUILDERS' CONSULTATIVE BOARD

*Specification of stone. Report No. 3.
pam. 8½". Manchester. 1932. 1s. R.

CONSTRUCTION, MEMBERS

BRITISH STANDARDS INSTITUTION

British standard specification for cast iron spigot and socket light rainwater pipes (cylindrical).
pam. 8½". Lond.: Crosby Lockwood. 1932. 2s. R.

CORKHILL (T.)

*Brickwork concrete and masonry.
8 vols. 7½". Lond.: Pitman. 1930-31. 6s. each. P.

MANNING (G. P.)

Construction in reinforced concrete.
7½". vii + 167 pp. Lond.: Pitman. 1932. 7s. 6d. P.

REYNOLDS (C. E.)

Reinforced concrete designers' handbook.
9½". xiv + 286 pp. Lond.: Concrete Pubns. (1932.) 15s. P.

SANITARY SCIENCE AND EQUIPMENT

PALLOT (A. C.)

*The Engineering equipment of buildings.
8½" x 5½". xii + 343 pp. + 2 diags. Lond.: Pitman. 1932. 15s. P. (extra copy).

SMITH (J. LANDRETH)

Notes on the septic tank system of sewage disposal.
pam. 7½". Lond.: P. S. King & Son. 1932. 1s. 6d. P.

WALDRAM (P. J.)

The Provision of adequate daylight in building regulations. (From *Proceedings of the International Illumination Congress, 1931.*)
pam. 9½". Camb.: U.P. 1931. *Presented by the author.*

SCIENTIFIC AND INDUSTRIAL RESEARCH, DEPT. OF

Technical paper No. 13. The equivalent temperature of a room and its measurement.
pam. 9½". Lond.: H.M.S.O. 1932. 6d. R.

PROOFING

BRITISH STANDARDS INSTITUTION

Draft. British standard definitions and methods of test for fire-resistance, in combustibility and non-inflammability of building materials and structures.
pam. 8½". Lond.: Crosby Lockwood. 1932. R.

INSTITUTION OF FIRE ENGINEERS

Annual conference (Ninth), Lond., 1932. [Including paper by A. H. Barnes: Building laws in relation to fire-resistance. . . .]
pam. 8½". Lond. [1932.] *Presented by the Institution.*CROOKES (S. IRWIN), *junr.**Earthquake-resisting construction. The Japanese method of calculation. (Auckland Univ. Coll. Bulletin No. 20.)
pam. 9½". Auckland. 1932. R. (2).

ENGINEERING

RAMELLI (AGOSTINO)

Le Diverse et artificiose machine.
12½". 336 + var. leaves. N.p.: In casa del' autore. 1588. P.
Contains the plates engraved from a set of original drawings on vellum in the Library (hitherto unidentified).

TOPOGRAPHY

BOYS (T. S.)

"Original views of London as it is, by Thomas Shotter Boys, 1842." A reissue . . . with . . . notes . . . and introd. by E. Beresford Chancellor.
12" + 9½". Lond.: Archl. Press. 1926. *Presented by Mr. C. Rowley.*

BITHELL (JETHRO)

Germany. A companion to German studies. [Chapter on German architecture and sculpture by M. S. Briggs.]
8½". xii + 423 pp. + 2 maps. Lond.: Methuen. 1932. 15s. P.

PEERS (E. A.)

Spain. A companion to Spanish studies. [Chapter on Spanish architecture and sculpture by M. S. Briggs.]
8½". xi + 302 pp. Lond.: Methuen. 1929. 12s. 6d. P.

REGIONAL AND TOWN PLANNING, GARDENS AND RURAL PRESERVATION

FAGG (C. C.) AND HUTCHINGS (G. E.)

An Introduction to regional Surveying.
8½". xi + 150 pp. + pl. Camb.: U.P. 1930. 7s. 6d. P.

BRIGHTON, HOVE AND DISTRICT JOINT TOWN PLANNING ADVISORY COMMITTEE

Report on the regional planning scheme.
Dossier of 2 vols. and map. 13" x 10". [Brighton.] 1932. R.

ADAMS (THOMAS), THOMPSON (F. LONGSTRETH), AND FRY (E. MAXWELL)

The Thames from Putney to Staines. A survey . . . (Joint Committee of the Middlesex and Surrey County Councils.)
11½" x 9½". 67 pp. + xvii pls. + map. [Lond.] 1930. 7s. 6d. R.

TAYLOR (G. C.)

Garden making by example.
9½" x 6½". vii + 130 pp., incl. pls. + pls. Lond.: Country Life. 1932. 10s. 6d. P.

CORNISH (VAUGHAN)

The Scenery of England. . . . (Council for the Preservation of Rural England.)
8½". 125 pp. + 8 pls. Lond.: C.P.R.E. 1932. 3s. 6d. P.

DRAWINGS, BUSTS AND MSS.

*Drawings*ADAM (ROBERT), *del.*

Monochrome drawing of a castle.
Signed and dated on back 1781.

Presented by Mr. Sidney Kitson [F.].

This drawing belongs to the same period as that of the 40 drawings by Adam in the Soane Museum, which were illustrated and described by Mr. A. T. Bolton in the *Architectural Review* of January 1925 (vol. 57, p. 28). These drawings, as Mr. Bolton explains, were made when Adam, in common with the other architects of his day, was feeling the effect of the war with the American colonists. Work was largely at a standstill, and Robert Adam turned for occupation to the design of imaginary scenes, Romantic and Classical, taking for his subjects not actual buildings, but drawing on his own fertile imagination and memory of Scottish scenery and architecture, Rhineland castles and Roman antiquity. The drawing will be reproduced as the frontispiece to the next JOURNAL. The thanks of the whole Institute are due to Mr. Kitson for his generosity in providing the Library with an excellent example of Robert Adam's work from this interesting phase in his career.

BOUET (GEORGES), *French archaeologist*

[Architectural subjects, France, Germany, Switzerland, etc.]

Over 1,500 sheets.

Pencil, ink, mono. and colour D. [18—.]

Presented by Mr. R. Fielding Dodd [F.].

GRAHAM (ALEXANDER)

[Views in European towns.] 2 sheets, framed. Ink D. [19—]

Presented by the Executors

Alexander Graham was Hon. Secretary of the Institute from 1861 to 1909.

PALLADIO BRAMANTE & C.

Ten photographs of architectural drawings by P— B— etc., Florence.

Presented by Mr. Harry Sims [Ret. F.]

Busts

COCKERELL (F. P.)

—, Onslow Ford, sc.

Brassy, [18—]

Presented by Mrs. Huddart through Mr. R. M. F. Huddart [F.]

*Manuscripts*CLARKE (JOSEPH), *recipient*

[18 letters and other documents, from John Ruskin, G. E. Scott, G. E. Street, John Fergusson, Beresford Hope, Dean Stanley, the Bishops of Dublin and Ripon, and others. Some relate to subscriptions to Archl. Museum.]

letters, etc., mostly c. 1860-80, [F.]

Ancient Lights

A LEGAL DECISION ON SKYLIGHTS

SMITH J. EVANGELIZATION SOCIETY INCORPORATED TRUST

Chancery Division, Maugham, J. 26, 27, 29 October

The judgment in the above case, which is reported at some length in the *Weekly Notes* of 5 November, p. 244, constitutes a definite decision upon a point of some importance to architects and surveyors upon which hitherto there has been no *ad hoc* legal authority.

Expressed briefly, this moot point is as to whether a plaintiff having side light from windows with prescriptive rights, and who has also enjoyed top light from skylights during the period of prescription, is or is not bound to give credit for such top light when asking the Courts for relief against a severe or overwhelming obstruction to his windows, notwithstanding the fact that top light unreinforced by side light is unsuitable for certain purposes (e.g. school classrooms), in addition to being precarious in that it would in the ordinary course of events disappear in the event of any raising or reasonable development of his property.

Fortunately the facts in this case were simple and clear.

The plaintiff had at the commencement of the prescriptive period a first-floor room with windows on two sides and also a skylight. During the prescriptive period the latter leaked (as usual) and was closed up, the room remaining amply lit by the large windows on two sides. One of these, abutting on the defendants' land, the defendants deliberately obstructed by a screen painted black.

The plaintiff's case for a mandatory order for removal of the screen was supported by evidence which the Court accepted to the effect that the erection of a reasonable building on adjoining land, partially developed, would leave more than half of the plaintiff's first-floor room dependent on light from the screened window.

The learned Judge, pledged to his decision in *Sheffield Masonic Hall Co. v. Sheffield Corporation*, 1932 2 Ch. p. 17, decided, in the opening words of his judgment, that "the skylights constituted the factor on which the decision must turn."

The judgment rules that on the authorities the Court must consider the state of things which existed at the commencement of the statutory period, and that if the obstruction would not have caused a nuisance to the room whilst it remained in enjoyment of the light from the skylight, it could not be held to have suffered legal nuisance without the skylight.

Opinions as to the equity of this ruling will probably differ as between the exponents of higher buildings and of adequate light and air to all buildings.

During the hearing of the case the point arose as to whether the Court ought not to presume a "lost grant" at, or prior to the commencement of the period of prescription; and, therefore, to consider only the state of things existing at the only period when such a lost grant could have been made. No reference, however, is made to this in the judgment as reported in the *Weekly Notes*.

Although the decision will not necessarily be binding upon any other judge of first instance until it has been considered and approved by the Court of Appeal, it constitutes definite guidance upon a point which under some circumstances can affect property values very materially.

It also supports by inference the point that if a dominant tenement has an excess of light when surrounded by buildings of reasonable height, its owner cannot with impunity deprive himself of any of that excess during the period of prescription.

P. J. WALDRAM [L.].

Correspondence

To the Editor, JOURNAL R.I.B.A.,—

101 Great Russell Street,

London, W.C.1.

19 November 1932.

DEAR SIR,—Canon Alexander kindly supplies me with a list of the Surveyors to St. Paul's.

I made the mistake of forgetting that Mr. Somers Clarke came between Mr. Penrose and Sir M. Macartney.

Will you kindly print this authoritative list for record?—

Yours sincerely,

BERESFORD PITE.

SURVEYORS TO ST. PAUL'S CATHEDRAL.

1662	SIR CHRISTOPHER WREN
17—1746.	JOHN JAMES. Also paymaster
1746-1756.	HENRY FLITCROFT ..
1756-1766.	STIFF LEADBETTER ..
1766-1821.	ROBERT MYLNE ..
1821-1852.	C. R. COCKERELL
1852-1897.	F. C. PENROSE
1897-1906.	SOMERS CLARKE
1906-1931.	SIR MERVYN MACARTNEY
1931	W. GODFREY ALLEN

Obituary

ERNEST JOHN GOSLING [F.]

Mr. Ernest John Gosling, who died at Mottingham, Kent, on 13 August 1932, was the son of the late Mr. John Gosling, at one time chief engineer for Messrs. John Penn and Son, formerly marine engineers of Greenwich. Mr. Gosling was born at Greenwich and spent the greater part of his life in the neighbourhood of Eltham.

He began his professional career as an articled pupil in the office of Mr. Ernest Newman, of Tooley Street, and at about the year 1888 started practice in partnership with Mr. W. J. Burrows in Gray's Inn. The partnership was dissolved in 1893, and from that date till the date of his death Mr. Gosling practised at 1 Verulam Buildings, Gray's Inn, W.C.1.

Mr. E. J. Gosling acted as architect for the enlargement of St. Andrew's Church at Mottingham, Kent, but for the most part his work was connected with domestic and commercial buildings. Amongst the former were houses on Sir George Woodman's Estate and many others in the neighbourhood of Eltham and Mottingham; houses at Cambridge; and one for the late Mr. Stowell Scott (Seton Merriman) at Woodbridge, Suffolk. His commercial work included shop premises for Messrs. John Gosling and Sons, Ltd., George Street, Richmond; for Messrs. Matthew and Son, Ltd., at Cambridge; and for Messrs. Robert Sayle and Co., Ltd., at Cambridge; factories for Messrs. T. Hubbuck and Son, Ltd., paint manufacturers, at Broad Street, Ratcliff, E., and for Messrs. Batger and Co., Ltd., sweet and jam makers, at Ratcliffe, E.

During the War he served as a special constable in the City of London.

Notes

PRESIDENT'S ENGAGEMENTS

During December the President will attend the Annual Dinners of the Royal Institute of the Architects of Ireland and the North Staffordshire Architectural Association, and the Jubilee Dinner of the York and East Yorkshire Architectural Society. He will also attend the Annual Dinner of the London Master Builders' Association and that of the Quantity Surveying Members of the Chartered Surveyors' Institution.

VICE-PRESIDENTS' ENGAGEMENTS

Mr. Sydney Tatchell (Vice-President) attended the dinner of the Worshipful Company of Glaziers on 23 November in place of the President.

Mr. L. Sylvester Sullivan (Vice-President) will be attending the dinner of the Association of Consulting Engineers on 9 December, in place of the President.

THE BUILDING INDUSTRY

A MEETING OF MANUFACTURERS AT THE R.I.B.A.

Sir Raymond Unwin presided at a largely attended meeting held on the 9th instant at the Royal Institute of British Architects to which were invited representatives of manufacturers of all classes of building materials to consider a scheme for an educational effort to encourage the interest of the public in the vital position which the industry occupies in the economic fabric of the nation.

Sir Raymond explained that the newly-formed Building

Industries National Council had its origin in the Conferences called in the early part of the year to consider the urgent problem of unemployment in the industry.

Mr. Sydney Tatchell, Mr. Howard Robertson and Mr. Oswald Healing dealt with the several activities of the Council and in particular of the Committee specially charged with the task of collecting and disseminating information.

Several speakers referred to the general lack of appreciation of the advantages to be derived from building at the present time when costs are at a very low level.

The proposals of the Committee met with the hearty and unanimous support of those present, and it was resolved that immediate steps be taken to put them into operation.

Many representatives present gave promises of immediate financial support towards the expenses of carrying out the proposals.

MR. BENSLYN'S LECTURE

On Thursday, 10 November, Mr. William T. Benslyn [F.] gave a lecture before the Incorporated Institute of British Decorators, at the London School of Hygiene and Tropical Medicine, on "Amusement and its Setting."

Mr. Benslyn illustrated his discussion on the appropriate setting for amusement with slides of modern theatres and cinemas erected recently in Europe and America, illustrating his remarks with a number of slides, he concluded with a few examples of Continental restaurants.

GARDEN CITIES AND TOWN-PLANNING ASSOCIATION

Mrs. Cecil Harmsworth gave a reception at 13 Hyde Park Gardens on Thursday, 10 November, to meet Sir Raymond Unwin. In the absence of the Earl of Lytton, the guests were received by the Earl of Crawford and Balcarres, to whose speech of welcome Sir Raymond Unwin replied. Dr. Norman Macfadyen also spoke.

TIMBER STORAGE AT THE SURREY COMMERCIAL DOCKS

The Science Standing Committee has much pleasure in informing members that considerable improvements have been made at the Surrey Commercial Docks. A recent letter from Mr. D. J. Owen, the general manager, reads:

... Since this matter has been under consideration it has been possible to arrange for stacks of timber to be piled on the slope as advocated by your Institute. During the last few years the Authority have provided at great expense additional undercover accommodation for timber, with the result that considerably less timber is stored in the open. Also a large amount of fresh drainage has been laid, and the old drainage destroyed, and this process will continue as opportunity occurs through merchants taking delivery of old piles.

You may be assured that everything possible is done to ensure freedom from damage whilst timber is in the custody of the Authority.

The Science Standing Committee has thanked the Authority for their efforts to eradicate possible sources of infection of sound timber from timber received by them in apparently sound condition, but which may have been infected in foreign ports or in transport, and has received the acquiescence of the Authority to the publication of the information

in order to allay the anxieties of members of the Institute to whom the matter is of serious import, and who will greatly welcome the knowledge that you have the question of further safeguards under serious consideration.

R.I.B.A. MEDALS FOR STUDENTS OF RECOGNISED SCHOOLS OF ARCHITECTURE

The Council of the R.I.B.A., on the recommendation of the Board of Architectural Education, have made the following awards:—

R.I.B.A. SILVER MEDAL AND £5 IN BOOKS

The R.I.B.A. Silver Medal and £5 in Books for Schools of Architecture recognised for exemption from the R.I.B.A. Final Examination has been awarded to Mr. E. Mayoreas, of the Architectural Association School of Architecture.

A Certificate of Honourable Mention was awarded to Mr. A. G. S. Fidler, of the Liverpool School of Architecture, University of Liverpool.

R.I.B.A. BRONZE MEDAL AND £5 IN BOOKS

The R.I.B.A. Bronze Medal and £5 in Books for Schools of Architecture recognised for exemption from the R.I.B.A. Intermediate Examination has been awarded to Mr. P. K. Pope, of the R.W.A. School of Architecture, Bristol.

A Certificate of Honourable Mention was awarded to Mr. M. G. Gilling, of the Liverpool School of Architecture, University of Liverpool.

RECOGNITION FOR EXEMPTION FROM THE INTERMEDIATE AND FINAL EXAMINATIONS

Under the terms of the scheme agreed between the Royal Institute of British Architects and the Royal Australian Institute of Architects whereby the Royal Australian Institute of Architects acts as the authority for architectural education and examinations in Australia, the School of Architecture of the

University of Melbourne has been recognised for exemption from the R.I.B.A. Intermediate and Final Examinations, in addition to the School of Architecture of the University of Sydney, which was recognised by the R.I.B.A. in 1925. The School of Architecture of the Sydney Technical College has been recognised for exemption from the R.I.B.A. Intermediate Examination.

R.I.B.A. CONFERENCE WITH TEACHERS AT ART SCHOOLS AND TECHNICAL COLLEGES

A Conference attended by teachers in Schools of Art and Technical Colleges was held at the Royal Institute of British Architects on Saturday, 5 November. An address on "Part-time Architectural Education" was given by Mr. W. N. Purchon, Vice-Chairman of the Board of Architectural Education and Head of the Welsh School of Architecture.

After Mr. Purchon's paper, which we hope to publish in the JOURNAL early in the New Year, a discussion took place, during which the following spoke:—

Mr. R. A. Dawson (Manchester School of Art), Mr. K. E. Black (Brighton School of Art), Mr. S. Reyner Day (Acton Technical College), Mr. F. E. Drury (L.C.C. School of Building, Brixton), Mr. C. S. Pictou (L.C.C. School of Building, Brixton), Mr. Martin S. Briggs (H.M. Inspector), Mr. Norman Keep (L.C.C. School of Building, Brixton), Mr. J. Herbert Jones (President of the South Wales Institute of Architects), Mr. S. N. Bertram (Oxford School of Arts and Crafts), Mr. W. M. Keesey (H.M. Inspector).

COMMONWEALTH FUND FELLOWSHIPS

Copies of the memorandum and form of application for the Commonwealth Fund Fellowships may be obtained, free, on application to the Secretary to the Committee of Award, Commonwealth Fund Fellowships, 35, Portman Square, London, W.1.

The Commonwealth Fund of New York, founded in 1918, and supported by gifts from the late Mrs. Stephen V. Harkness, has established for British subjects a number of Fellowships tenable at certain American universities. The Fellowships, which are available for architects, are confined to university graduates, but a graduate who is taking a course at a school of architecture which is not a university school would be eligible to apply for a Fellowship.

There is no fixed stipend, but the emoluments attaching to each Fellowship, which is estimated at the approximate annual value of \$3,000, is calculated to cover the full expenses of residence, travel and study in the United States during the year.

ARCHITECTS' BENEVOLENT SOCIETY

DONATION FROM MR. GREVILLE MONTGOMERY

The Architects' Benevolent Society have received a donation of £105 from Mr. H. Greville Montgomery, Honorary A.R.I.B.A. from the Building Trades Exhibition. This is the seventh donation which the Society has to thank Mr. Montgomery for, the total amount received being nearly £800.

ARCHITECTS' UNEMPLOYMENT RELIEF SCHEME

The following donations also have been received by the Architects' Unemployment Relief Fund since the publication of the last list in the JOURNAL:—

The Chartered Architects Lodge No. 3244 per Mr. C. McArthur Butler, £14 14s.

Mr. Wilfrid Bond (second donation), £5 5s.

Mr. Martin S. Briggs, £5.

Z.Y.X., 10s.

Mr. T. Stewart Purdie has joined as a monthly subscriber

Allied Societies

WEST YORKSHIRE SOCIETY OF ARCHITECTS.

The opening meeting of the session took place at the Great Northern Hotel, Leeds, on 3 November, when Mr. B. R. Gribbon, the President, gave his presidential address.

Mr. Gribbon opened his speech with a discussion of the adoption of the revised Articles of Association, which, he said, would mark the close of a definite chapter in the Society's history. The Society had long outgrown the Articles ruling since 1885, and under the new Articles it would be possible to form branches of the Society, which should add appreciably to its efficient working. He discussed the proposed reclassification of members, especially with regard to the formation of a "Students' Association" having its own officers and, as far as possible, its own control and administration, the idea being to interest the younger members in questions of organisation and responsibility. Mr. Gribbon appealed for a wider Student Membership to insure the success of this experiment.

With regard to the educational work of the Society, Mr. Gribbon spoke of the development and formation of the Leeds School of Architecture, and stressed the importance of the competitions organised by the Society. He referred to the wider question of the architectural education of the public, and in this connection pointed out how essential it was that in training school children they should train not only the prospective architect but the prospective employer of architects. An enormous amount of building work, involving the expenditure of several millions a year, is carried out for local authorities, of which bodies only a few members have any knowledge of architecture or architectural practice. Until there is a public which can appreciate and demand it, a high standard of architecture can never be attained. The Society was trying to do this by means of lectures.

With reference to new building the President said that, owing to the financial crisis, little had been done, but he mentioned the Civic Building in Leeds, Mr. Atkinson's store for Messrs. Lewis, the Motor Store by Bain and Johnson, Mr. Charlton's new church for the Leeds Church Forward Movement, and Mr. Paxton's winning design in the Wakefield Diocesan Churches scheme. He continued with a brief discussion of the Headrow Development Scheme, and pointed out that the restrictions still imposed were by now unnecessary, and that a greater latitude in design would tend to improve the formal and rather unsuitable character of what was after all a shopping centre, whose chief characteristic should be energy and enterprise and not the tranquility of traditional repose.

With regard to unemployment, Mr. Gribbon said that the Society had appealed to practising members to keep on their assistants and to the assistants to accept a reduced rate of pay. He thanked them for their sporting response to this appeal, and said that without their co-operation the unemployment figures, which now totalled 2 per cent. of the total membership, would be very much higher. After unemployment, we hope, continued Mr. Gribbon, comes employ-

ment, and added that in his opinion the end of a well-defined phase of building had been reached, a phase in which building had come chiefly under two heads, Housing and Public Works. As a result of poor returns from other investments, and low building costs, a period of private building might begin, especially in the case of business firms and religious or charitable bodies, who had been saving their money for the appropriate moment.

Mr. Gribbon then gave a few relevant statistics about the State administration of Housing during the last 13 years, showing that nearly two-thirds of the houses erected are still built through private enterprise, and that the fringe only of the slum problem has been attacked. In criticising the very unsatisfactory situation Mr. Gribbon commented upon the unfortunate results on the housing problem of the need for national economy, and on the fact that the whole scheme was over-officialised and lacking in direct control. He mentioned the efforts made by the Press, the Building Societies, and Social Welfare Societies to tackle the problem, and appealed to everyone to regard it as an individual duty to find some remedy. Mr. Gribbon roughly outlined a scheme which would make use of the money lying practically idle in the banks and Building Societies to provide houses for the poorer classes, and suggested that a portion of the money paid in unemployment relief might be diverted as a subsidy towards the wages of operatives engaged in the erection of small dwellings. This scheme would mean a saving for each man transferred from dole to subsidy, provision of more houses, less influx to the slums, more men in employment with greater purchasing power, and therefore a benefit to industry generally, and the erection of houses would once more become a practicable proposition for investment purposes.

With regard to the slum problem, Mr. Gribbon said that this was not one of the unremunerative schemes that we could afford to neglect. Apart from the economic advantages of rent returns, rates, employment, less expenditure on health services, there was the fact that the knowledge that something is being done will help to alleviate the growing social unrest which, if the problem is neglected, might end in a far greater cost to the nation.

In conclusion, Mr. Gribbon discussed the gain to the individual from membership of the Society and all the work it entailed. He said that though the financial gain was very small indeed, the gain in comradeship and professional unity was incalculable. It was their aim to uphold the status of the profession, to promote honourable practice, to advance architectural education, and above all to show a readiness for social service, and this was only possible through collective effort, working through an organisation such as the R.I.B.A. had perfected throughout the Empire. This great achievement had only been made possible by the steady work of the Allied Societies and their undeviating allegiance to the R.I.B.A. "If the time should come to test the efficiency of this organisation," concluded Mr. Gribbon, "I am assured there will be no failure on the part of the West Yorkshire Society."

SCHOOL NOTES

THE ARCHITECTURAL ASSOCIATION'S SCHOOL PROSPECTUS.

The new prospectus for the Architectural Association School has recently been issued. It contains full particulars about the work of the school, the syllabus of the course of training and lists of the staff. The last pages are occupied by a number of excellent reproductions of recent school work. It can be obtained from the secretary of the school, 34-36 Bedford Square, W.1.

THE WELSH SCHOOL OF ARCHITECTURE

VISIT TO THE WESTGATE HOTEL, CARDIFF

The students of the Welsh School of Architecture, accompanied by

Mr. Lewis John [A.], Mr. A. MacLean [A.], and Mr. W. S. Purchon, the Head of the School, visited the Westgate Hotel, Cardiff, on Wednesday, 9 November. The party was shown round the building by Mr. Percy Thomas [F.], of the firm of Messrs. Ivor Jones and Percy Thomas, the architects of the building, and by Mr. Dark, the building manager of the Brewery Company, Messrs. S. A. Brain and Co.

The students first inspected the exterior, which has been carried out in the Georgian manner with Tondou bricks, Portland stone and a green slated roof. The party then studied the excellent set of working drawings which were on exhibition in the skittle alley, and examined the interior of the building. The visit proved to be particularly interesting and useful to the students, who, on the proposal of Mr. W. S. Purchon, passed a hearty vote of thanks to Mr. Percy Thomas and Mr. Dark.

Membership Lists

PROBATIONERS

During the month of October 1932 the following were registered as Probationers of the Royal Institute:—

ADIE: FRANCIS HUBERT, 97 Cromwell Road, S.W.7.
 BACON: AMY THREESA, "Rye Flat," Dean Row, Wilmslow, near Manchester.
 BROWN: HENRY CHARLES, Roker Villa, Kiln Lane, St. Helens, Lancs.
 BURCHILL: JOHN GEORGE, 33D Polygon Buildings, Euston, N.W.1.
 CANNING: FELIX, Weeksborough, Marldon, Paignton, Devon.
 CHANDLER: GEORGE RICHARD, 1 Portobello Road, Walton-on-Naze, Essex.
 CHAPMAN: EDWARD GILBERT JOHN, 25 The Green, Kew, Surrey.
 CHRISTIE: COLIN PHILIP, 26 Charnwood Road, Barwell, Leics.
 CORBETT: GEORGE UVEDALE SPENCER, Steyning, Sussex.
 DANIELL: JAMES HENRY, 17 Peter Avenue, Willesden, N.W.10.
 DAVIS: OSCAR BARSAGH, 245 Willesden Lane, London, N.W.2.
 DREWITT: GEOFFERY BERNARD, Trelyn, Polwithen, Penzance.
 FERGUSON: WALTER KEITH, 7 Somerset Road, Hendon, N.W.4.
 GALLAGHER: HERBERT HENRY ASQUITH, Pallastown, Kinsale, Co. Cork, Ireland.
 HENDERSON: JOHN CAMPBELL DE COURCY, 7 Leigh Road, Clifton, Bristol 8.
 JEFFERY: LEONARD, "The Lodge," North Hill Park, St. Austell, Cornwall.
 LAURENCE: PHILLIP HENRY, The Parsonage, Peaslake, Surrey.
 LAWRIE: KENNETH, "Holmfield," Hartshill Road, Stoke-on-Trent.
 LEACH: BASIL FRANK, 2 Leaside, Eastbourne, Sussex.
 LOVE: MARGARET JEAN SUTHERLAND, 78 Kilmarnock Road, Glasgow, S.1.
 LYONS: SAMUEL VICTOR, "The Gables," Seafield Road, Clontarf, Dublin.

McBRATNEY: RICHARD NORMAN, Gardiners Hill, St. Lukes, Cork.
 McKAY: CRAWFORD, 31 Harcourt Drive, Dennistoun, Glasgow, E.
 MACKAY: IAN MACKENZIE, 1 Stewart Terrace, Barnhill, Angus.
 MINSON: STEWART WILLIAM, c/o New Zealand House, Strand, W.C.
 MITCHELL: MAURICE THOMAS, 52 Bulwer Road, New Bathnet, Kent.
 MORRIS: GRENVILLE, Borough Chambers, Neath, Glam.
 MULVEY: WILLIAM JOHN, 14 Freegrove Road, Holloway, N.7.
 OETFEWELL: RICHERDA, Saxmundham House, Swanage, Dorset.
 PARK: JOSEPH WILLIAM BARCLAY, 78 High Craiginds, Kilsen, Glasgow.
 READE: PATRICK LEIGHTON DE WALTON, Seymour, Kibbles Hill, Newton Abbot, South Devon.
 SIMONS: NORMAN JOSEPH RICHARD, "Paradiso," Windsor Road, Egham, Surrey.
 SIMPSON: IAN BEGG, 71 Marlborough Mansions, West Hampstead, N.W.6.
 SIMPSON: RICHARD GEORGE, 9 Avenue Crescent, Acton, W.3.
 SMYTH: ROY JOHN, 1 Myddelton Park, Whetstone, N.20.
 STEADMAN: STANLEY EDWARD, 14 Mortimer Road, Kensal Rise, N.W.10.
 STYLE: DAVID LESLIE, Boxby House, Boxby, Maidstone, Kent.
 TOOTE: DOUGLAS RONALD NOEL, 9 Sherwood Court, Seymour Place, W.1.
 TRANMER: DOROTHY PHYLLIS, 34 Park Parade, Harrogate.
 WATMORE: JACK ORRIDGE JAMES, 105 Breamore Road, Seven Kings, Essex.
 WILSON: ALLAN BARROWMAN, Fernlea, Alexandra Avenue, Preston, Ayrshire.
 WOOD: JOHN, 110 Hewthwaite Terrace, Carnforth, Lancs.
 WOODHOUSE: WILFRED MEYNELL, 19 Wigmore Street, Cavendish Square, W.1.
 WOODROW: ANNIE CRAWFORD, 110 Haggis Road, Glasgow, S.1.

NOTES FROM THE MINUTES OF THE COUNCIL

24 October 1932

THE WORK OF THE SESSION

The President submitted for the Council's consideration a memorandum on the future policy of the Institute and the work of the forthcoming Session.

THE BUILDING INDUSTRIES NATIONAL COUNCIL

It was resolved to approve and support the scheme for the establishment of the Building Industries National Council and to take such part in it as is appropriate.

R.I.B.A. STATUTORY EXAMINATION FOR DISTRICT SURVEYORS, OCTOBER 1932

The Board of Architectural Education reported that five candidates had sat for the examination, and on the recommendation of the Board the following two candidates were passed:

Button, Frederick C.
 McDowall, Eric D.

R.I.B.A. EXAMINATION FOR BUILDING SURVEYORS, OCTOBER 1932

The Board reported that two candidates had sat for the examination, and on their recommendation the following candidate was passed:

Cannell, Albert.

OBITUARY

Resolutions of sympathy were passed to the relatives of the late Mr. Harry Hutt [F.], Past-President of the Berks, Bucks and Oxon Architectural Association, and the late Mr. W. T. Jones [F.], Past-President of the Northern Architectural Association, both former members of the Council.

MR. HENRY M. FLETCHER [F.]

A special vote of thanks was passed in favour of Mr. Henry M. Fletcher for his valuable services on the Council, Executive and other Committees from which he has recently retired.

THE R.I.B.A. ARCHITECTURE MEDALS

The Council formally approved the award of the Jury for award of the medal in the area of the Berks, Bucks and Oxon Architectural Association to:

The Municipal Offices,
 Queen Victoria Road,
 High Wycombe, Bucks.

designed by:

Mr. C. Cowles Voysey [F.] and Mr. R. G. Brocklehurst [L.]

BRITISH STANDARDS INSTITUTION TECHNICAL COMMITTEE ON LUBRICATING PIPES AND FITTINGS

Mr. R. Minton Taylor [F.] was appointed to represent the R.I.B.A. on the above Committee.

ARCHITECTS' REGISTRATION COUNCIL

Mr. E. Stanley Hall [F.] was appointed to represent the R.I.B.A. on a small Computation Committee set up by the Architects' Registration Council.

PERSONNEL OF R.I.B.A. COMMITTEES

Art Standing Committee

Mr. H. V. Lanchester [F.] was appointed to serve on the Art Standing Committee in place of Mr. Robert Atkinson [F.] who regretted his inability to accept membership.

Town Planning and Housing Committee

Slum Clearance Committee

Mr. Thomas Adams [F.] was appointed as an additional member of the above Committees.

Aerodromes Committee

The Council formally approved the action of the Aerodromes Committee in co-opting the following members:

Major Roseveare, Borough Engineer of Eastbourne (representing the Institution of Municipal and County Engineers).
Mr. F. Handley Page (representing the Institute of Transport).
Mr. W. R. Davidge (representing the Town Planning Institute).
General F. Festing.

MEMBERSHIP

The following Members were elected:

As Hon. Fellow	1
As Fellows	3
As Associates	5
As Licentiates	22

Applications for Membership were approved as follows:

As Hon. Corresponding Members ..	2
As Fellows	12
As Associates	88

TRANSFER TO ASSOCIATESHIP

The following architect was transferred to the Associateship under the provisions of the Supplemental Charter of 1925:

Phillips, Harold John

TRANSFER TO THE RETIRED MEMBERS CLASS

The following Members were transferred to the Retired Members Class:

As Retired Fellows

John Gibbons
Jonathan Simpson

As Retired Licentiates

Henry Goodrick Lazenby
John Beaumont Tansley

RESIGNATIONS

The following resignations were accepted with regret:

Stanford Morton Brooks [F.]
Hubert Ernest Gifford [A.]
Lionel Ernest Skipwith [A.]
John George Castle [L.]
George Thomas Wilson [L.]
George Sylvan de Wilde [L.]

REINSTATEMENT

The following ex-members were reinstated:

As Associate: Edward Berks Norris
As Licentiate: Izmay Massey

Notices

THE SECOND GENERAL MEETING

MONDAY, 5 DECEMBER 1932, AT 8 P.M.

The Second General Meeting of the Session 1932-33 will be held on Monday, 5 December 1932, at 8 p.m., for the following purposes:—

To read the Minutes of the First General Meeting, held on Monday, 7 November 1932; formally to admit members attending for the first time since their election.

To read the following paper: "The R.I.B.A. New Premises Competition," by Mr. Robert Atkinson [F.].

The premiated and commended designs, together with the revised design for the new premises prepared by the architect, Mr. G. Grey Wornum [F.], will be on exhibition at this meeting.

To present the London Architecture Medal and Diploma for 1931 to Messrs. A. E. Richardson and C. Lovett Gill, F.F.R.I.B.A., for their building, St. Margaret's House, 19-23 Wells Street, W.1.

THE R.I.B.A. LONDON ARCHITECTURE MEDAL, 1932

The attention of members is drawn to the Form of Nomination and the conditions, subject to which the award will be made, for a building completed within a radius of eight miles from Charing Cross during the three years ending 31 December 1932, issued separately with the current number of the JOURNAL. Any member of the Royal Institute is at liberty to nominate any building for consideration by the Jury.

The Nomination Forms should be returned to the Secretary R.I.B.A. not later than 28 February 1933.

NEW BUILDING MATERIALS AND PREPARATIONS

The Science Standing Committee wish to draw attention to the fact that information in the records of the Building Research Station, Garston, Watford, is freely available to any member of the architectural profession, and suggest that architects would be well advised, when considering the use of new materials and preparations of which they have had no previous experience, to apply to the Director for any information he can impart regarding their properties and application.

THE NATIONAL ASSOCIATION OF WATER USERS

Members are reminded that the National Association of Water Users, on which the R.I.B.A. is represented, exists for the purpose of protecting the interests of consumers.

Members who experience difficulties with water companies, etc., in connection with fittings are recommended to seek the advice of the Association. The address of the Association is 46 Cannon Street, London, E.C.4.

BRITISH ARCHITECTS' CONFERENCE 1933

The Annual Conference of the R.I.B.A. and Allied and Associated Societies will be held in Cambridge from 21 to 24 June 1933.

ELECTION VOID

Under the provisions of Bye-law 17 the following election has become void:

William Worrall, as associate.

Competitions

ANTWERP: TOWN PLANNING COMPETITION

The Council of La Société Intercommunale de la rive gauche de l'Escaut invite proposals for a scheme for the replanning of the area situated on the bank of the river opposite Antwerp. Proposals submitted will be examined by a Jury consisting of:

Dr. H. P. Berlage, The Hague.
Mons. H. Prost, Paris.
Mons. le Baron Horta, Brussels.
Mons. Henry Van de Velde, Brussels.
Mons. P. De Heem, Antwerp.
Mons. G. De Ridder, Antwerp.
Mons. J. de Brucy, Antwerp.

Premiums: 100,000 francs, two of 50,000 francs and four of 25,000 francs.

Last day for sending in proposals: 31 May 1933.

The programme and necessary plans relating to the competition may be obtained on application to the offices of the Society, 26 Rue Arenburg, Antwerp. Deposits, 20 francs for the programme and 80 francs for the plans.

STOCKHOLM: TOWN PLANNING COMPETITION

The City of Stockholm, through its town planning board, invites proposals for a town planning scheme to cover the area designated Lower Norrmalm, which occupies a central position in the city. The object of the competition is to secure preliminary proposals for a solution of the town planning problem, which would enable a gradual reconstruction of this district to be carried out, with due regard to the present requirements as to the capacity of the streets and the supply of light and air for the blocks of houses.

Proposals submitted will be examined by a committee consisting of the following:—

Harry Sandberg, Civic Councillor, Stockholm (Chairman).
Dr. Yngue Larsson, Civic Councillor, Stockholm (Vice-Chairman).

Gustaf Ahlbin, Stockholm.
E. G. Asplund, Stockholm.
Carl Bergsten, Stockholm.
Hermann Jansen, Berlin.
Albert Lilienberg, Director of Town Planning, Stockholm.
Professor Ragnar Ostberg (Hon. Corresponding Member R.I.B.A.), Stockholm.

George L. Pepler, London.

Premiums: 20,000 Kr. (approx. £1,000)

15,000 Kr. (approx. £750)

10,000 Kr. (approx. £500)

and further amounts to bring the total prize money up to 60,000 Kr.

Last day for sending in proposals: 1 March 1933.

Last day for questions: 1 August 1932.

HOUSES IN CONCRETE

The Cement Marketing Co., Ltd., invite architects residing in the British Isles to submit in competition designs for four types of houses, intended to illustrate the uses of white and coloured Portland Cements.

Assessors: Mr. Louis de Soissons, O.B.E. [F.].

Mr. P. D. Hepworth [F.].

Mr. Howard Robertson, M.C. [F.].

Premiums: 30 guineas and 15 guineas for each type of house.

Last day for receiving designs: 3 December 1932.

COMPETITION FOR CAFÉ AND SHELTER, CANVEY ISLAND

Members of the Royal Institute of British Architects and of its Allied Societies must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

NEW TOWN HALL AT PORTSTEWART,
CO. LONDONDERRY

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members should not take part in the competition.

WILLINGTON U.D.C. HOUSING SCHEME

The Competitions Committee desire to call the attention of Members to the fact that the Conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members should not take part in the competition.

Members' Column

FLAT TO LET.

SMALL Furnished Service Flat. Large Reception Room, Bedroom and Bath, at 59 George Street, Portman Square, W.1., to Let 3 guineas weekly. Suit married or two single Institute members. Write A.R.I.B.A., 2 Featherstone Buildings, High Holborn, W.C.1.

OFFICE TO LET

ADELPHI, W.C.2. Member has an excellent unfurnished office available from Xmas. £44 0 0 p.a. Box No. 2210, c/o Secretary R.I.B.A.

A.B.S. INSURANCE DEPARTMENT.

HOUSE PURCHASE SCHEME

(for property in Great Britain only).

Further Privileges now Available.

The Society is able, through the services of a leading Assurance Office, to assist an Architect (or his client) in securing the capital for the purchase of a house for his own occupation, on the following terms:—

AMOUNT OF LOAN.

Property value exceeding £666, but not exceeding £2,500 75 per cent. of the value.

Property value exceeding £2,500, but not exceeding £4,500 66½ per cent. of the value.

The value of the property is that certified by the Surveyor employed by the Office.

N.B.—Legal costs and survey fees, and, in certain cases, the amount of the first quarter's premium payment will be advanced in addition to the normal loan.

RATE OF INTEREST.

In respect of loans not exceeding £2,000 5½ per cent. gross.

" " in excess of " 5½ " "

REPAYMENT.

By means of an Endowment Assurance which discharges the loan at the end of 15 or 20 years, or at the *earlier death* of the borrower.

SPECIAL CONCESSION TO ARCHITECTS.

In the case of houses in course of erection, it has been arranged that, provided the Plan and Specification have been approved by the Surveyor acting for the Office, and the amount of the loan agreed upon, and subject to the house being completed in accordance therewith, ONE HALF of the loan will be advanced on a certificate from the Office's Surveyor that the walls of the house are erected and the roof on and covered in.

NOTE.—Since 1928, over £50,000 has been loaned to architects under this scheme, and as a result over £600 has been handed to the Benevolent Society.

If a quotation is required, kindly send details of your age next birthday, approximate value of house and its exact situation, to the Secretary, A.B.S. Insurance Department, 9 Conduit Street, London, W.

R.I.B.A. JOURNAL.

DATES OF PUBLICATION.—1932: 10, 24 December. 1933: 14, 28 January; 11, 25 February; 11, 25 March; 8, 29 April; 13, 27 May; 17 June; 8, 22 July; 5 August; 9 September; 14 October.

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